

DOCUMENT RESUME

ED 164 770

08

CE 017 657

TITLE Secondary Career Education Project. Final Performance Report.

INSTITUTION Roseville Area School District 623, Minn.

SPONS AGENCY Office of Career Education (DHEW/OE), Washington, D.C.

BUREAU NO 554AH50058

GRANT G007503738

NOTE 90p.; Not available in hard copy due to thin type in original document; For related documents see ED 114 586 and ED 120 411

EDRS PRICE MF-\$0.83 Plus Postage. HC Not Available from EDRS.

DESCRIPTORS Career Awareness; *Career Education; Career Exploration; Career Planning; *Community Involvement; *Curriculum Development; Decision Making Skills; *Faculty Development; Interpersonal Competence; Junior High Schools; Mainstreaming; Program Attitudes; *Program Effectiveness; *Program Evaluation; Program Improvement; Resource Centers; Secondary Education; Self Concept; Senior High Schools; Stereotypes; Work Attitudes

IDENTIFIERS Education Amendments 1974

ABSTRACT

The Roseville Area Schools' secondary career education project was based on a broad definition of career education, emphasizing career development as a lifelong process. About thirty community members, students, and district staff participated on project advisory or task force committees. About one-third of the professional certified district staff members participated in at least one of the staff development options which included college courses and an internship exchange program with business and community agencies. A major component of the project was to develop and field-test a grade 7-12 career education curriculum that would contribute to the attainment of five student outcome objectives. Sixty-four staff members were involved in the development and/or field testing, and a total of 765 class lessons were developed that covered all five student outcome areas at both the junior and senior high levels. In general, the students expressed the perception that they had a better understanding of career-related concepts as a result of working on the curriculum units. Attainment of student outcomes also was measured by testing the students before and after the curriculum units with an instrument specifically developed for each unit. Overall, the results of this testing indicated little difference between pre and post test scores. Teacher reactions to the career education curriculum were favorable. In addition, career learning centers were established in three schools and efforts were made to deal with problems of racial and sexual stereotyping and mainstreaming of the handicapped. (Author/BM)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

Roseville Area Schools

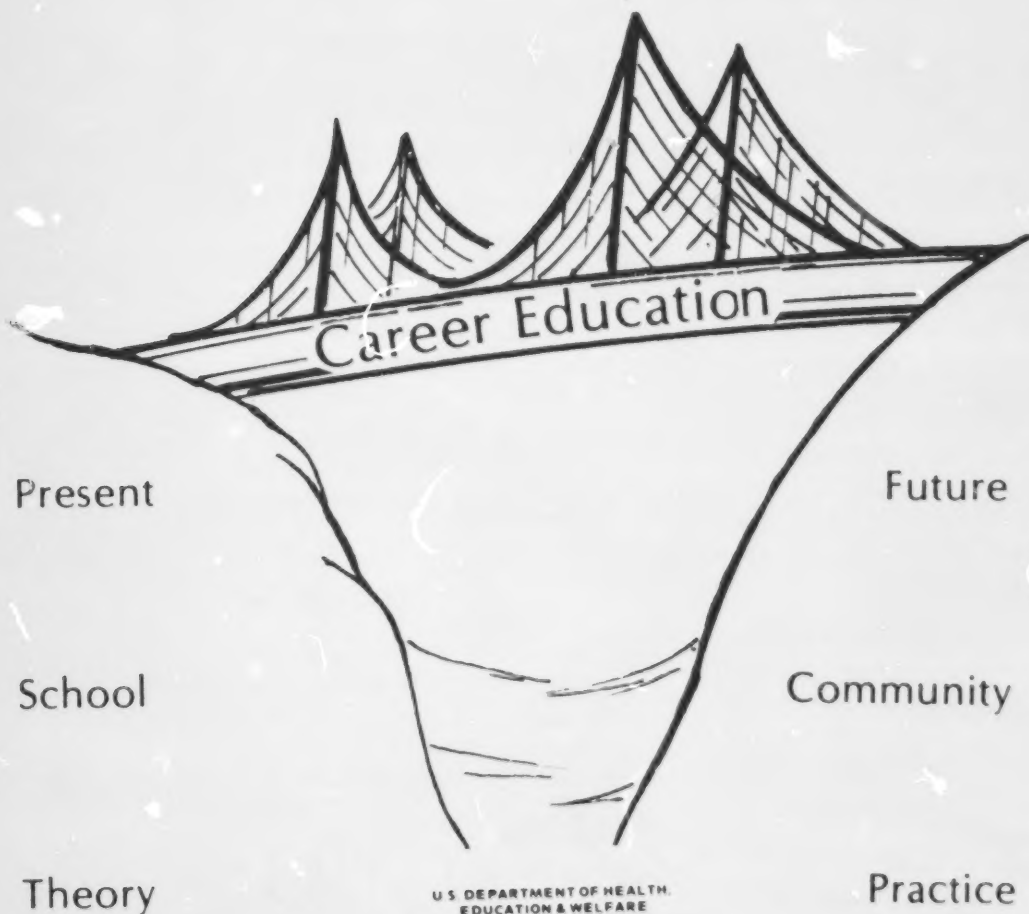
Roseville, Minnesota

Secondary Career Education Project

BEST COPY AVAILABLE

FINAL PERFORMANCE REPORT

Copy 2



U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

OCT 5 1970

ED164770

CE 017 657

ROSEVILLE AREA SCHOOLS

Independent School District 623
1251 W. County Road B-2
St. Paul, Minnesota 55113

CAREER EDUCATION PERFORMANCE REPORT

Dr. Arland Benson, Project Director
Dorothy Henriksen, Staff Facilitator

The material in this publication was prepared pursuant to a grant or contract from the Office of Education, U.S. Department of Health, Education, and Welfare. However, points of view or opinions expressed do not necessarily represent policies or positions of the Office of Education.

DISCRIMINATION PROHIBITED

Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972, Public Law 92-318, states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Therefore, career education projects supported under Sections 402 and 406 of the Education Amendments of 1974, like every program or activity receiving financial assistance from the U.S. Department of Health, Education, and Welfare, must be operated in compliance with these laws.

Office of Occupational Education
Vernon M. Vick, Coordinator

CAREER EDUCATION PERFORMANCE REPORT

PROJECT NO.	554AH50058
GRANT NO.	G-007503738
NATURE OF REPORT	Final Report
PROJECT TITLE	A Career Education Model Plan for Effecting Incremental Change in a Local School System.
PERIOD COVERED BY THIS REPORT	July 1, 1975 through June 29, 1976
CATEGORY OF PROJECT	Incremental Improvement
PROJECT DIRECTOR	Dr. Arland N. Benson
GRANTEE	Roseville Area Schools Independent School District #623 1251 West County Road B-2 Roseville, Minnesota 55113
TELEPHONE	612-633-8150

P R E F A C E

A many-faceted Career Education Project, such as the one being implemented in the secondary schools of the Roseville Area Schools, Independent District #623, necessarily moves on many fronts at the same time. While not always emphasizing all aspects equally or simultaneously, the staff can point to many accomplishments and solid beginnings in all components of the project, as detailed in the following final report.

Dr. Arland Benson
Project Director

Mrs. Dorothy Henriksen
Staff Facilitator

FORWARD

This report culminates the Roseville Area Schools' first year of involvement as a national demonstration site for Career Education. Being one of 80 sites across the nation, and the only one in Minnesota, has placed a special obligation on our District to provide a maximum effort in demonstrating a successful Career Education model for this region of the country.

It is hoped that this report will provide insight into what is effective and what is not in assisting young people with their Career Development.

Demonstrating Career Education at the local school level is one of the truest tests of the effectiveness of the Career Education movement. We are pleased to be a part of it.

Vernon M. Vick, Coordinator
Occupational Education

TABLE OF CONTENTS

	<u>Page No.</u>
Project Information	i
Preface	ii
Forward	iii
Major Activities	1
Project Participants	3
Evaluation	4
Anticipated Changes and/or Problems	46
Dissemination	48
Special Activities	54
Report Abstract	56
Appendix A	60

MAJOR ACTIVITIES

A Career Education Model Plan for Effecting Incremental Change in a Local School System

The Roseville Area Schools' Secondary Career Education Project completed its first year of operation with U. S. Office of Education funds in June 1976. The goals of the project were based on a broad definition of career education which emphasized career development as a life long process. Career was defined much more broadly than occupational or paid employment activities and included parenting and leisure time activities. One's pattern of career roles included student, parent, and volunteer, as well as job holder.

Objectives

The project's philosophy of career education was evident in the outcome and process objectives that were identified in the project proposal.

Student Outcome Objectives

- A. To implement a positive self-concept with awareness of personal characteristics as they relate to career roles.
- B. To apply decision-making skills to personal life planning.
- C. To acquire increasing knowledge of educational-vocational possibilities, as well as experience in work related settings.
- D. To develop and apply the interpersonal competency skills required in preferred career and life-style plans.
- E. To develop a respect for work, including its personal, as well as its social, contributions and implications.

The project also included more specific behavioral objectives for each of the five basic student outcomes: positive self-concept, decision-making, life-style and vocational exploration, interpersonal competence, and work meaning and values.

Staff Outcome Objectives Staff was defined as both school district employees and community members who participated in the staff development activities.

- A. To develop a greater awareness of career education definitions.
- B. To develop a greater awareness of the issues involved in career education.
- C. To develop a positive attitude towards career education.
- D. To develop greater awareness of school and community expectations between groups.
- F. To develop teaching and youth advising skills in the five areas of student outcome objectives.

Process Objectives Four major activities were identified in the proposal whose implementation would hopefully lead to the attainment of the outcome objectives:

staff development, curriculum development, career learning centers, and student-centered career maturity measurement.

- A. At least one-sixth of the staff and all interested community members will be involved in one or more staff development activities: Short course options, college-credit workshop options, school-community visitations and exchanges, internships.
- B. Ten of the twelve secondary departments will be involved in developing, field testing and disseminating 400 career education class lessons per department.
- C. Activities will be developed which will involve 60 students (and parents) in measuring the degree of attainment of the career-maturity objectives.
- D. Career Resource Centers will be established in three schools to serve the function of coordinating (a) student-centered career maturity measurement, (b) community-related activities, (c) print and non-print materials, and (d) teaming with teachers on curriculum field testing.

The reader is referred to Section 11 (Evaluation) for more details on specific Project accomplishments.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

CAREER EDUCATION PROGRAM
PARTICIPANT SUMMARY

NOTE. Participants include those DIRECTLY served by the project or, in the case of most parents and persons in the business/labor/industry community, who actively assist in project implementation. "Actively assist" includes efforts such as serving as resource persons, serving on Advisory Groups, providing work experience, etc.

FORM APPROVED
OMB NO. 51-R1187

10) PROJECT PARTICIPANTS

NUMBER OF PARTICIPANTS (see NOTE above) WHO ARE	RACE/ETHNICITY (all Participants including Handicapped, Gifted and Talented, and Low Income)						OF THE TOTAL (column (6)) NUMBER WHO ARE			OF THE TOTAL (column (6)) NUMBER WHO ARE	
	AMERICAN INDIAN OR ALASKAN NATIVE (1)	ASIAN OR PACIFIC ISLANDER (2)	BLACK/ NEGRO (3)	CAUCASIAN/ WHITE (4)	HISPANIC (5)	TOTAL (sum of columns (1) through (5)) (6)	HANDI- CAPPED (7)	GIFTED AND TALENTED (8)	LOW INCOME (9)	MALE (10)	FEMALE (11)
STUDENTS											
ELEMENTARY (K-6)											
MIDDLE/JUNIOR HIGH (7-9)	3	1	11	1478	7	1500	11	No Statistics	9	780	720
SENIOR HIGH (10-12)	0	1	3	394	2	400	4	Available	2	208	192
2-YEAR COLLEGE											
4-YEAR COLLEGE											
ADULTS (non-matriculated)											
SUB-TOTAL						1900					
EDUCATIONAL PERSONNEL											
TEACHERS				132		132				57	75
COUNSELORS				10		10				6	4
ADMINISTRATORS			1	2		3				3	
MEMBERS OF THE BUSINESS/ LABOR/INDUSTRY COMMUNITY				75		75					
PARENTS				200		200					
OTHER (specify)											
TOTAL						420					

EVALUATION

Evaluation Design

The evaluation design was developed after extensive discussions with the evaluation consultant. It was agreed that the activities included in the evaluation design were to meet the evaluation needs of the project. It also was agreed that the evaluation design would be flexible as new information needs were identified.

Using the outcome and process objectives in the first-year (1975-76) project proposal as the primary source of evaluation needs, a set of evaluation questions were identified. For each evaluation question, the instruments and techniques that were used to provide data to answer the question have been identified.

Community and Staff Input

1. Did the advisory committee serve a useful purpose?
 - a. Minutes of advisory committee meetings including dates, content, evidence of advisory committee input.
 - b. Questionnaire to advisory committee members regarding perceptions of meetings and project staff in relation to value of committee and involvement in decision making. Given at end of third meeting and near end of year.
2. Did the building steering committees serve a useful purpose?
 - a. Records of major committee activities and actions; needs assessment, evaluation, developing building policy.
3. How do staff participants view the project?
 - a. Staff participants on steering committees, curriculum development, and instruction will complete questionnaires regarding opportunities for input, organization-administration of the project, and value of project activities in which they participated.

Staff Development

4. How many school staff members participated in at least one of the staff development options?
 - a. Record kept by project staff indicating school staff participation in the following options: short-course, two-credit general course, two-credit sub-options, school-community visitations-exchanges, and internships.
5. How many community members participated in at least one of the staff development options?
 - a. Record kept by project staff similar to 4.a.

6. What were the staff development participants' reactions to the staff development options?
 - a. Questionnaire immediately after participation in option to measure strengths and weaknesses of the staff development activities.
7. Did the participants in the staff development options develop more positive attitudes toward career education?
 - a. Locally-developed questionnaire administered prior to participation in staff development options, immediately after participation, and, if sufficient time has elapsed, at the end of the school year. The questionnaire also will be given to teachers who use the career education mini-units. The questionnaire will include items measuring the respondents' feelings about the value of career education and their willingness to become involved in career education.
 - b. A record will be kept that indicates the participants' involvement in career education activities from the end of the staff development until the end of the school year.
8. Did the participants in staff development options develop a greater awareness of career education definitions, issues, models, programs, and materials?
 - a. Knowledge test administered before and after participation in staff development options that have greater awareness of career education definitions, issues, models, programs, and materials as their objectives; for example, the two-credit general course.
9. Did participants in staff development options develop greater awareness of expectations and greater communication and trust between school and community groups?
 - a. Pre-post questionnaire to participants in staff development options that included school-community communication as an objective.
10. Did participants in staff development options develop teaching and advising skills in the five areas of student outcome objectives, and in shared decision skills in groups and organizations?
 - a. Evaluation undetermined at this time until options and activities are identified that will address these objectives. If activities are conducted, evaluation will include an assessment of skills in the identified areas by both staff and students.

Curriculum Development

11. Did the amount of curriculum development meet the goal set at the beginning of the year regarding number of departments, composition of department teams, number of mini-units for each student outcome area, and grade level participation?
 - a. Record of curriculum development kept in project office.

12. Were criteria for the development of curriculum mini-units established?
 - a. Set of criteria in project office.
13. Did the developed mini-units meet the established criteria?
 - a. Rating of mini-units by project director and evaluator.
14. Were the mini-units field tested by at least two teachers?
 - a. Record of field testing.
15. What were the students' reactions to the content of and method by which the mini-units were presented?
 - a. Student questionnaire at the end of each unit.

Student-Centered Career Maturity Measurement

16. Was a process developed that provides for student-centered measurement of career maturity?
 - a. Statement of the components of the process; e.g. necessary criteria, optional activities, etc.
17. To what extent was the student-centered process put into action during the 1975-76 school year?
 - a. Record of participation at identified sites; e.g. Parkview advisors, Kellogg elective course.
18. What are the participants reactions to the student-centered career maturity measurement process?
 - a. Questionnaire and interviews with participating staff and students.

Resource Centers

19. What activities took place in the three career resource centers?
 - a. Resource aide will keep a daily log of activities using the following categories: student and staff use of resource center; resource aide contacts with students, staff, and community; community use of resource center.
20. How do students and staff perceive the value of the career-resource center services?
 - a. End-of-the-year questionnaires and interviews with a sample of students and staff who used the resource center.
 - b. Interviews with career resource aides.

Student Outcomes

Five major student outcomes were identified in the project proposal: more positive self-concept (increased self awareness), greater awareness and knowledge of decision making skills and consequences, increased knowledge of life style options (including career and occupational choices), improved interpersonal skills (communication, group dynamics, cooperation), and improved attitudes toward careers and work.

21. Did the students who participated in the project activities show improvement in the identified student outcome areas?

- a. Knowledge and attitude tests will be administered before and after participation in instructional mini-units. Many of the items on the tests will be locally developed and will be specifically designed to measure attainment of student outcomes that are covered by the particular mini-units. Items from commercial instruments, such as the Career Maturity Inventory and the ACT Assessment of Career Development scales, will be used when appropriate. Since the extent of student participation in career education activities is not known at this time, it is not possible to indicate the number of students who will be evaluated, or the number of tests that will be developed.
- b. Case studies of several students will be conducted. It is anticipated that students who participate in the student-centered career maturity measurement component of the project will have a substantial amount of data related to their growth in the identified student outcome areas. Several of these students will be selected for more intensive case studies.
- c. The project staff and the evaluator will attempt to develop innovative methods and techniques for measuring student outcomes.

22. Did the project staff and evaluator develop a junior high level and a senior high level attitude and knowledge test that measures the student outcomes identified in the Roseville project?

At the present time it does not appear that any instruments are available that adequately measure the attainment of the student outcomes for this project. At the end of the first project year (1975-76), it is hoped that two instruments (one junior high, one senior high) can be constructed that will measure the student outcomes. The tests used for the mini-unit evaluations (see evaluation question 21) will serve as the primary source of items for the more general instruments. Roseville will then have instruments that can be used to conduct appropriate district-wide assessments of their career education goals for students.

Evaluation Results

The results will be reported according to the format outlined in the evaluation design. Evaluation questions will be stated and data will be presented for six areas representing major components of the project: advisory committees, staff development, curriculum development, student-centered career maturity measurement, resource centers, and student outcomes.

Advisory Committees

The proposal indicated that a district-wide advisory committee and building steering committees would be established to help guide the implementation of the project activities.

Did the advisory committee serve a useful purpose? The district-wide project advisory committee, which included students, community members, district staff, and project staff, met monthly from September to April. The minutes of the meetings indicated that the advisory committee reviewed project activities and suggested implementation procedures. The committee helped organize several project-related task forces and committees: career resource center, parent-student night, directory, and internship-exchange.

The directory task force used an earlier addition of a community resource directory to develop a listing of speakers and field trip sites that could be used as career education activities. The format of the directory allowed for continuous addition or deletion of activities. Directories were kept in the career resource centers in each school. The parent-student night committee developed a two-hour evening workshop on career planning and alternative futures. About two-hundred parents and students attended.

Eighteen of the 29 members of the advisory committee, the directory task force, and the exchange task force completed questionnaires in May 1976. All, or almost all, of the respondents gave favorable answers to the items (Table 1 on page 9). Eighty-nine percent of the respondents felt that their committee served a useful purpose; the other 11% said they were not sure. All respondents said that they were given sufficient opportunity to express their views regarding the project and that the project staff was receptive to their opinions.

Did the building steering committees serve a useful purpose? Building steering committees, which consisted of a counselor, an administrator, the resource center aide, and teacher representatives, met from one to four times in four of

Table 1
Reactions of Advisory Committee Members to the Project
(N=18)^a

Question	Response	Percent
1. Do you have a clear understanding of the goals and objectives of the Roseville Secondary Career Education Project?	Yes No	100% 0
2. Do you agree with the goals and objectives of the Roseville Secondary Career Education Project?	Yes, all of them Some of them No	100 0 0
3. Do you agree with the procedures that are being used to attain the project objectives?	Yes, all of them Some of them No	83 17 0
4. Do you feel that you were given sufficient opportunity to express your views regarding the Secondary Career Education Project?	Yes No	100 0
5. Do you feel that the Secondary Career Education Project staff was receptive to your views and opinions?	Yes No	100 0
6. Do you feel that your advisory committee (or task force) had an impact on the direction taken by the Secondary Career Education Project?	Yes No Not Sure	83 0 17
7. Do you feel that your committee (or task force) has served a useful purpose?	Yes No Not Sure	89 0 11

^a Questionnaires were returned by 18 of the 29 members on the advisory committee, the directory task force, and the exchange task force.

the five secondary schools in the district. The purpose of the committees was to coordinate and promote career education activities within each building. According to the project staff, the major accomplishment of the building steering committees was to promote the project activities; workshop participation, curriculum writing, and materials distribution.

Staff Development

The proposal indicated that several staff development options would be available to district school personnel and community members: college-credit courses, short courses, exchange-internships, and curriculum development.

Three different two-credit college courses were conducted by the project director for Roseville staff: introduction to career education (fall and winter sessions), group work skills (fall and winter sessions), and teacher-advisor skills. The content of the introductory course included the goals of career education, issues in career education, relationships of occupations and work to lifestyles, changing roles of women, and methods, materials, and resources for career education.

The group work skills course covered basic areas of group process; the structure of groups, developing a climate for teaching, group leadership skills, and examples of group learning. The teacher-advisor skills course included work on interpersonal communication and helping relationships and their application to school situations: monitoring student progress, parent conferencing, using the Career Resource Center, and career-related small group activities.

The Internship-Exchange Program was established (a) to create greater understanding and cooperation between the community and schools, and (b) to increase the staff participants' competencies in career education. Staff members who participated in the program completed learning contracts that indicated the objectives of their internship and how the experience would be used in the school setting afterward. For example, an industrial arts teacher applied for an internship to assist in a graphics or printing firm. The purposes of this internship were to gain first-hand experience of industry's expectations of employees, to be able to more accurately assess student progress, and to improve the general curriculum.

The ten-hour short courses indicated in the proposal were not conducted. The other major opportunity for staff development, curriculum writing and field testing, will be discussed in a later section.

How many staff members participated in at least one of the staff development options. About one-third of the professional certificated district staff members

participated in at least one of the options. The total involvement, or attendance, in the options was 196 staff members, representing 131 different people.

	<u>Number of Staff</u>
Two-credit introduction to career education	55
Two-credit group work skills	35
Two-credit teacher-advisor skills	19
Internships	22
Exchanges	1
Short courses	0
Curriculum writing and field testing	64

How many community members participated in at least one of the staff development options? Community participation in the staff development options was not great. Several community members were involved in the internship program and about 100 parents attended the two-hour parent-student workshop. No community members, who were not also district employees, participated in the credit workshops.

The project director indicated that he would like to have the project become more involved with parent education, perhaps exploring things such as family career planning that could be picked up by community education.

What were the staff development participants' reactions to the staff development options? Participants in the credit courses were given a questionnaire at the end of the course requesting their reactions to the course.

All of the participants in the introductory career education course said that they became much more or somewhat more familiar with career development concepts and with models, programs, materials, and resources for implementing career education (Table 2 on page 12). Eighty percent of the respondents reported that their attitude toward career education became much or somewhat more positive, that they would recommend the course to their colleagues, and that the instructional methods used in the course were excellent or good.

Participants in the group work skills option responded positively to the course, although the instructional methods were not viewed as favorably as in the introductory course (Table 3 on page 13). About one-third of the participants were not sure if they would recommend the course to their colleagues. The reactions to the winter session were substantially more favorable than reactions to the fall session. Fewer people participated in the winter session and different instructional methods were used. The majority of the participants indicated that the course helped them in group work skill areas, with about half of the respondents saying

Table 2
Participant Reactions to the Fall 1975 and Winter 1976
Two-Credit Introductory General Courses
(N=32)

Question	Response	Percent
As a result of this course did you become familiar with career development concepts and their relationship to education?	Yes, much more familiar	52%
	Yes, somewhat more familiar	48
	No, although I was not familiar with career development concepts	0
	No, I already was familiar with the content covered in this course	0
As a result of this course did you become familiar with models, programs, materials and resources for implementing career education?	Yes, much more familiar	37%
	Yes, somewhat more familiar	60
	No, although I was not familiar with models, materials and resources	0
	No, I already was familiar with the models and resources covered in this course	0
As a result of this course, has your attitude toward career education changed?	Yes, much more positive	44%
	Yes, somewhat more positive	37
	No, has not changed	15
	Yes, somewhat more negative	4
	Yes, much more negative	0
Would you recommend this course to your colleagues?	Yes	81%
	No	2
	Not Sure	17
Overall, how would you rate the instructional methods used in this course?	Excellent	15
	Good	71
	Fair	13
	Poor	0

Table 3
Participants' Reactions to the Fall 1976 and
Winter 1976 Group Work Skills Workshop
(N=35)

How Much Has Participation in this Course Helped You in the Following Areas	Much Help	Some Help	Little Or No Help	I Did Not Need Any Help
Understanding of group dynamics	46%	37%	11%	6%
Overall ability to lead a group	23	60	17	0
Comfort level as a group leader	17	63	20	0
Comfort level as a group member	34	46	6	14
Knowledge of how to orient students to group work	34	57	9	9
Knowledge of activities and techniques to use in group work	51	46	3	0
Knowledge of what to look for in the group process	54	43	3	0
Ability to observe group process and behavior	37	57	6	0
How to evaluate group process	31	63	6	0
Would you recommend this course to your colleagues?	Yes 57%	No 9%	Not Sure 34%	
Overall, how would you rate the instructional methods used in this course?	Excellent 14%	Good 46%	Fair 34%	Poor 6%

they received "much help" in understanding group dynamics, knowing about group work techniques, and knowing what to look for in the group process.

Participants in the teacher-advisor skills option also felt the course was helpful. All, or almost all, respondents said that they received much or some help in the following areas: understanding how relationships are developed, knowledge of school and community resources for helping students, understanding of interpersonal conflict, and knowledge of career decision-making process (Table 4 on page 15).

Follow-up questionnaires were returned by thirteen staff members who participated in the Internship-Exchange Program. Eleven of the thirteen respondents felt that they met their internship objectives; the other two said "somewhat." Eleven interns felt that the experience will help the career development of their students; planning curriculum (3), background for class (5), refer to community help (3).

Did the participants in the staff development options develop more positive attitudes toward career education? The staff members who participated in the fall introductory career education course generally expressed positive attitudes toward career education before taking the course. However, after the course, the participants' attitudes were more favorable (Table 5 on page 16). For example, before the workshop, 75% of the participants agreed (26% strongly) that all staff members should be involved in career education activities. After the workshop, 90% agreed with 52% saying that they strongly agreed.

The participants in the introductory course also expressed a greater willingness to be involved in career education activities after the course than they did before the course (Table 6 on page 17). On the posttest, 72% of the respondents said they would be willing to teach some curriculum lessons related to career education, compared with 47% on the pretest.

What impact did the fall introductory course have on the participants' actual involvement in career education activities during the 1975-76 school year? Based on results of a follow-up survey sent to twenty-two classroom teachers, the impact was substantial. Ninety percent of the teachers reported that the introductory course had a positive effect on their participation in career education activities; 27% said they were much more active and 59% said they were somewhat more active in 1975-76 than in 1974-75 (Table 7 on page 18). The respondents indicated substantially greater activity in the following areas: development of curriculum lessons, teaching career education lessons, making career education materials available.

Table 4
Self-Ratings and Ratings of Course Helpfulness by
Participants in the Teacher Advisor Skills Course
(N=19)

		How would you rate yourself at the present time in the following areas				Indicate the extent to which the course helped you in the following areas			
		Excellent	Good	Fair	A Lot to Learn	Much Help	Help	No Help	Need Help
Understanding of how helping relationships are developed	Pretest	0%	33%	53%	13%	-	-	-	-
	Posttest	16	84	0	0	37%	58%	5%	0%
Knowledge of interpersonal communication	Pretest	0	47	40	13	-	-	-	-
	Posttest	21	74	5	0	32	68	0	0
Knowledge of school and community resources for helping students	Pretest	0	27	47	27	-	-	-	-
	Posttest	37	42	16	5	58	42	0	0
Knowledge of school records	Pretest	0	20	47	33	-	-	-	-
	Posttest	37	37	26	0	26	47	21	5
Comfort level in one to one teacher-student relationships	Pretest	0	67	27	7	-	-	-	-
	Posttest	47	37	16	0	21	53	16	0
Knowledge of the career decision making process	Pretest	20	27	33	20	-	-	-	-
	Posttest	16	68	11	5	32	63	5	0
Understanding of inter-personal conflict	Pretest	0	13	47	33	-	-	-	-
	Posttest	32	58	11	0	26	68	5	0

Table 5
Participants' Attitudes Toward Career Education
Before and After a Career Education Workshop
(N=31)^a

		Strongly Agree	Agree	Disagree	Strongly Disagree
1. All staff members should be involved in career education activities	Pretest Posttest	26% 52	48% 39	16% 10	10% 0
2. Career education should not be a high priority item in the school budget	Pretest Posttest	4 6	18 13	57 61	21 19
3. Students should participate in career education activities at every grade level	Pretest Posttest	36 42	46 45	14 13	4 0
4. Career education activities should not be conducted within the classroom	Pretest Posttest	0 0	6 0	42 39	52 61
5. Most career education activities should be conducted by counselors, coordinators and other support personnel	Pretest Posttest	0 3	17 10	50 45	33 42
6. I feel that I have the necessary skills and understanding to participate effectively in career education activities	Pretest Posttest	7 26	43 58	33 16	17 0
7. It is not appropriate to have career education activities in some subject areas	Pretest Posttest	6 0	13 10	55 48	26 42
8. Career education should be an integral part of the total school curriculum	Pretest Posttest	38 65	52 32	7 3	3 0
9. I have a good understanding of the purposes of a career education program	Pretest Posttest	3 39	43 61	37 0	17 0
10. In many subjects, there is just not enough time for career education activities	Pretest Posttest	7 6	10 6	63 65	20 23

^aData is from participants in the fall 1975 workshop only.

Table 6
Participants' Willingness to Be Involved in Career Education
Activities Before and After a Career Education Workshop
(N=31)^a

Statement		Yes	Not Sure	No
Help develop and write curriculum lessons for use in the classroom	Pretest	29%	32%	39%
	Posttest	33	47	20
Become familiar with career education materials and resources	Pretest	97	0	3
	Posttest	100	0	0
Teach some curriculum lessons related to career education	Pretest	47	30	23
	Posttest	72	17	10
Be a committee member to develop a career education program for your school	Pretest	29	29	42
	Posttest	30	40	30
Arrange for resource speakers, plan career education field trips	Pretest	39	42	19
	Posttest	52	23	26
Work with individual or small groups of students on career development activities	Pretest	68	23	10
	Posttest	84	16	0
Make career education materials available to students, or direct students to materials	Pretest	94	0	6
	Posttest	90	6	3

^aData is from participants in the fall 1975 workshop only.

Table 7
Post-Workshop Participation in Career Education Activities
(N=22)

Question	Response		Percent
Do you think that taking the Introductory Course on Career Education had any positive effect on your participation in career education activities this past year (1975-76)?	Yes		90%
	No		10
Compared with the previous school year (1974-75), how active have you been in career education activities this year (1975-76)?	Much more active in 1975-76		27%
	Somewhat more active in 1975-76		59
	About the same in 1975-76 as in 1974-75		14
	Somewhat less active in 1975-76		0
	Much less active in 1975-76		0

Indicate the extent to which you participated in the following activities	School Year	More than 5 Times	3-5 Times	Once or Twice	Never
Developed curriculum lessons in career education	1974-75	9%	4%	35%	52%
	1975-76	41	23	36	0
Taught career education lessons in the classroom	1974-75	17	4	35	43
	1975-76	55	18	18	9
Arranged for resource speakers and career-related field trips	1974-75	17	0	26	57
	1975-76	5	5	55	36
Worked with individual or groups of students on career development	1974-75	22	4	26	48
	1975-76	41	18	27	14
Made career education materials available or directed students to them	1974-75	30	4	35	30
	1975-76	55	14	32	0

The group work skills course also appeared to have an impact on the participants' attitudes and willingness to use group work procedures. About 80% of the participants indicated that their attitude towards using group work has become more positive and that they are more likely to use group process as a result of taking the course (Table 8 on page 20).

Participants in the fall group work skills course were followed up at the end of the year. About half of the teachers said they have used skills learned in the course at least once a week since January 1, 1976 (Table 9 on page 21). Some areas in which the group work skills were used most frequently were: observing classroom procedures (60%), teaching in the classroom (84%), special group work in classroom (71%), and participating in faculty groups (60%).

Did the participants in staff development options develop a greater awareness of career education definitions, issues, models, programs, and materials? Participants in the introductory career education course were given a 25-point career education knowledge test before and after the course. The mean score for the participants in the fall session increased from 5.6 on the pretest to 15.2 on the posttest (Table 10 on page 22). The participants also were more confident of their answers on the posttest. The mean confidence ratings on the posttest fell between "somewhat sure" and "very sure". On the pretest, the mean confidence ratings were between "an educated guess" and "somewhat sure". Similar results were obtained for the participants in the winter session.

Did participants in staff development options develop greater awareness of expectations and greater communication and trust between school and community groups? The only staff development option related to this question was the Internship-Exchange Program. The impact of this option on expectations, communications, and trust was not evaluated because of limited evaluation resources.

Did participants in staff development options develop teaching and advising skills in the five areas of student outcome objectives, and in shared decision skills in groups and organizations? Both the group work and teacher-advisor courses dealt with skills that could be used to help students attain the student outcome objectives. Participants in the group work skills course were given a 22-point test, whose content was specific to the cognitive objectives of the course, at the beginning and end of the course. A typical question was to name four basic characteristics of an effective interpersonal climate for teaching. The total mean score for the participants in the fall session increased from 7.1 on the pretest to 14.0 on the posttest. Participants in the winter session, which received more favorable ratings by the participants, showed greater improvement (Table 8 on page 20).

Table 8
Staff Outcomes Related to Participation in Fall 1975
and Winter 1976 Group Work Skills Courses
(Fall, N=23; Winter, N=10)

Selected Items and Total Score	Possible Points Correct	Pre Workshop Mean	Post Workshop Mean
Four basic elements or characteristics that are common to all groups (Fall only)	4	1.0	2.9
Four basic characteristics of an effective interpersonal climate for teaching (Fall only)	4	1.5	3.1
Three task behaviors and three climate behaviors that you might observe in a group in order to evaluate how well a group is functioning (Fall only)	6	1.5	2.8
Total score on content test Fall 1975	22	7.1	14.0
Total score on content test Winter 1976	22	4.9	18.9

As a result of taking this course I am likely to use group process: (Total Fall and Winter)	More The Same Less	81% 19 0
My attitudes towards using group work has become: (Total Fall and Winter)	More Positive The Same Less Positive	84% 16 0
I feel that group work skills are an essential part of career education (Total Fall and Winter)	Strongly Agree Agree Disagree Strongly Disagree	75% 22 0 3

Table 9
Post- Workshop Use of Group Work Skills
(N=20)

Question	Response	Percent
Since January 1, 1976, how often have you used group work skills that you learned in the group work skills course?	Very frequently (almost every day)	15%
	Frequently (about once a week)	40
	Occasionally (once or twice a month)	35
	Once or twice	10
	Never	0
Indicate whether or not you have used group work skills learned in the group work skills course in the following areas since January 1, 1976		
	Yes Percent	No Percent
Observing classroom process	60%	40%
Teaching in the classroom	84	16
Special group work with children in the classroom	71	29
Special group work with children outside the classroom	55	45
Participating in faculty groups	60	40
Teaching career education units	44	56
Career education activities other than teaching	35	65

Table 10

Participants' Knowledge of Career Education Concepts Before and
After a General Career Education Workshop in Fall 1975
(N=31)

Item	Mean		Mean	
	Knowledge Pre	Score Post	Confidence Pre	Score ^a Post
Give a definition of career	1.0	3.2	2.6	1.3
List four basic career needs of youth	1.7	3.4	2.8	1.3
How are Vocational Education, Occupational Education, and Career Education different?	1.1	2.5	2.9	1.3
Describe briefly one way that schools could implement Career Education	0.8	1.5	2.4	1.4
Total score on knowledge test ^b	5.6	15.2	-	-

^a The respondents expressed their confidence in their answer on the following four point scale:

1. Very sure of my answer; I'm familiar with current thought in this area.
2. Somewhat sure of my answer; I'm somewhat familiar with current thought in this area.
3. My answer is an "educated" guess; although I'm not familiar with current thought in this area.
4. My answer is a "shot in the dark"; I'm not familiar with the current thought.

^b The mean score on the knowledge test for twenty participants in a similar course held in winter 1976 was 5.7 on the pretest and 17.9 on the posttest.

The participants' self-ratings of their competencies in several group work skill areas improved substantially (Table 11 on page 24). For example, before the course, one-fourth of the participants rated their knowledge of activities and techniques to use in group work as "excellent" or "good". After the course, three-fourths of the participants rated their skills in this area as excellent or good.

Participants in the teacher-advisor skills course also rated themselves substantially higher in several areas after taking the course (Table 4 on page 15). After the course, 100% of the participants gave themselves excellent or good ratings on understanding how helping relationships are developed, compared with 33% at the beginning of the course.

Curriculum Development

A major component of the project was to develop and field test a grade 7-12 career education curriculum that would contribute to the attainment of the five student outcome objectives.

Were criteria for the development of curriculum mini-units established?

Although no criteria were formally established in writing, several guidelines were consistently used by the project staff as they worked with the curriculum writers:

- . written objectives that address one or more of the five student outcome objectives.
- . description of activities and materials for each class lesson.
- . description of evaluation procedures.
- . avoidance of overlap with other curriculum units.
- . clearly written to enhance replication and dissemination.

Did the amount of curriculum development meet the goal set at the beginning of the year regarding number of departments, composition of department teams, number of mini-units for each student outcome area, and grade level participation?

Although some general guidelines were given in the project proposal--such as involvement of four of twelve departments--no specific goals were set regarding units per outcome area or grade level. However, a general goal of 400 class lessons was considered to be a target figure. Several factors accounted for the difficulty in establishing specific curriculum development goals by subject area, outcome area, and grade level. Some career education units, which had been developed in previous years, needed varying amounts of revision, while other units had to proceed through the entire developmental process. Second, the general philosophy of the project was to infuse the units into the regular curriculum rather than have separate career education packages. It was difficult to judge

Table 11
Participants' Self-Ratings in Several Group Work Areas
Before and After a Group Work Skills Workshop
(N=23)^a

		Excellent	Good	Fair	A Lot To Learn
Understanding of group dynamics	Pretest	4%	17%	35%	44%
	Posttest	4	73	23	0
Overall ability to lead a group	Pretest	9	35	44	13
	Posttest	17	65	17	0
Comfort level as a group leader	Pretest	4	35	48	13
	Posttest	13	70	13	4
Comfort level as a group member	Pretest	13	70	17	0
	Posttest	44	48	9	0
Knowledge of how to orient students to group work	Pretest	4	17	57	22
	Posttest	9	61	26	4
Knowledge of activities and techniques to use in group work	Pretest	4	17	35	44
	Posttest	9	61	26	4
Knowledge of what to look for in the group process	Pretest	4	13	35	48
	Posttest	26	57	17	0
Ability to observe group process and behavior	Pretest	4	22	35	39
	Posttest	17	57	22	4
How to evaluate group progress	Pretest	0	9	35	57
	Posttest	17	70	13	0

^aThe results in this table are from the Fall 1975 course only.

the level at which each of the various departments would accept this concept. There was no district-wide policy or recommendation that each department should participate at a particular level. The project staff had to solicit the cooperation of the departments and teachers. In fact, at the beginning of the year, staff response to project requests for curriculum writers was not overwhelming. However, by the middle of the school year, staff response began to increase, and the point was reached where more than the projected budget amount for curriculum development was expended by the end of the project year.

A complete summary of curriculum development during the first year of the project is given in Table 12 on page 26. Each curriculum is described by the subject area, grade level, goal (student outcome) area, new-revised, core-supportive, number of class lessons, number of teachers involved, teacher development time, and field testing. A total of 765 class lessons were developed. These 765 lessons can be roughly summarized as follows.

Junior High	45%	Revised	59%
Senior High	55	New	41
Core	68%	Field Tested	50%
Supportive	32	Not Field Tested	50

The term core means that the lesson was written in one of the subject areas designated as a primary deliverer of career education curriculum; i.e. career education objectives can be infused most easily and logically into the existing curriculum. Non-core subject areas were designated as supportive areas; i.e. the career education curriculum in these subject areas supports, or reinforces, the core material in a manner unique to the supportive area.

The 765 lessons covered all five goal areas at both the junior and senior high level. However, goal IV, interpersonal skills, was covered in only two supportive areas and in no core areas.

What were the students' reactions to the content of and methods by which the mini-units were presented? At the end of each unit, students were asked to give their reactions to the unit. Seven of the questionnaire items were standard for all units. Table 13 on page 29 shows the student responses to these items for eight different units.

A large majority of the students in each of the eight units said that the purpose of the unit and the directions for the unit were clear to them.

Table 12
Curriculum Development and Field Testing

Subject and Grade Level	Unit Name Description	Goal Areas I - V	New or Revised	Core or Supportive	Number Class Lessons	Number of Teachers	Total Teacher Hours	Total Sub Days	Month Field Tested	Number Students Involved
Art 7, 8, 9	Five mini-units at each grade level	I - IV	Revised	Supportive	55	2	65	4.0	Oct 75 to May 76	100
Art 10, 11, 12	All senior high mini-units except leisure time art	I - V	Revised	Supportive	20	2	30	3.0	Oct 75 to May 76	60
English 7	Who Am I?	I	Revised	Core	9	1	9	0.5	April 76	90
	Personal Decision Making	II	Revised	Core	6	3	18	2.0	Feb 76	120
	Exploring Clusters	III	Revised	Core	10	3	30	2.5	March 76	120
English 8	What Are My Values?	I	Revised	Core	12	2	24	2.0	Jan 76	120
	Significant Others	I - II	Revised	Core	8	4	32	4.0	April 76	240
English 9	What Would Happen If?	II	Revised	Core	9	3	27	3.0	Nov 75	300
English Senior High	Recording Minutes	III	New	Core	5	1	20	0.0	June 76	30
	Oral Communication	I, III, IV	Revised	Core	45	2	60	2.0	May 76	60
	Interaction	II, IV	Revised	Core	45	2	0	4.0	May 76	60
	Writing	III, IV	New	Core	10	1	20	0.0	-	-

Table 12 (continued)
Curriculum Development and Field Testing

Subject and Grade Level	Unit Name Description	Goal Areas I - V	New or Revised	Core or Supportive	Number Class Lessons	Number of Teachers	Total Teacher Hours	Total Sub Days	Month Field Tested	Number Students Involved
English Senior High (cont.)	Media TV Film	III	New	Core	15	2	60	0.0	-	-
	Adult World	III	Revised	Core	45	2	80	0.0	-	-
	Western Heroes	III	Revised	Supportive	45	1	40	0.0	-	-
	Independent Study	I - III	New	Supportive	45	2	60	0.0	-	-
	Focus English	III	New	Core	15	1	60	0.0	-	-
Foreign Language Senior High	Role Playing	I, III, V	New	Supportive	45	2	180	2.0	April 76	60
27 - Guidance Class 11-12	Career Planning Elective	III, V	New	Core	45	4	96	0.0	-	-
Home Econ 7	Personal Development	I	New	Core	15	2	50	7.5	May 76	120
Home Econ 8 9	Career Education infused into Home Ec electives	III, V	New	Core	40	5	200	5.0	-	-
Home Econ 12	Occupational Foods	I - III	New	Core	12	1	50	2.0	-	-
Industrial Arts 7-12	Career education curriculum for I.A.	III, V	New	Core	35	4	120	0.0	-	-

Table 12 (continued)
Curriculum Development and Field Testing

Subject and Grade Level	Unit Name Description	Goal Areas I - V	New or Revised	Core or Supportive	Number Class Lessons	Number of Teachers	Total Teacher Hours	Total Sub Days	Month Field Tested	Number Students Involved
Math 9	Math in Construction and sales	III, V	New	Supportive	10	1	170	3.0	May 76	30
Reading 7-8	Reading units	III, V	New	Supportive	10	1	30	0.0	-	-
Science 9	Career related units	III	Revised	Core	Students choose 3 of 4 of 65	5	0	5.0	May 76	600
- 28 - Social Studies 9	Career Planning and Alternative Futures	I, III, V	Revised	Core	25	2	80	10.0	May 76	240
Social Studies 7	Family Unit	III, V	Revised	Core	10	1	30	0.0	-	-
9	Career Planning Unit	I, III, V	Revised	Core	30	7	360	7.0	-	-
12	The Good Life	V	New	Core	12	2	80	2.0	-	-
Teacher Advisor 7-9	Teacher Advisor Program	I - V	Revised	Supportive	12	5	40	0.0	-	-

Table 13
Student Reactions to a Sample of Curriculum Units

	Response	A N=105	B N=72	C N=170	D N=479	E N=35	F N=141	G N=51	H N=70
Was the purpose of this unit clear to you?	Yes	76%	82%	82%	88%	71%	81%	82%	87%
How much did you enjoy working on this unit?	A lot	15	43	31	46	14	14	18	36
	Some	64	51	51	45	57	67	54	64
	Little	20	6	18	9	29	19	28	0
How much did you learn in this unit?	A lot	15	38	42	23	26	25	12	43
	Some	69	57	47	59	51	61	61	53
	Little	16	6	11	17	23	14	27	4
29 Were the directions for the unit clear?	Yes	88	99	85	82	85	86	88	89
The length of the unit was:	Too long	17	4	6	6	23	15	14	20
	About right	73	83	65	44	71	80	59	67
	Too short	10	13	29	50	6	5	27	13
Would you like other activities like this during the year?	Yes	52	78	57	85	44	57	56	68
Did you learn new things in this unit?	Most of the work was new	24	44	42	42	37	30	14	44
	About half of the work was new	47	47	44	41	51	56	59	49
	Most of the work was on things I already knew	30	8	14	18	11	14	27	7

(A) Grade 7 English, Decision Making
(B) Grade 8 English, Values
(C) Grade 7 English, Exploring Clusters
(D) Grade 9 Science, Mini-Units

(E) Grade 7 Home Economics
(F) Grade 8 English, Significant Others
(G) Grade 7 English, Who Am I?
(H) Grade 9 Social Studies

About half of the students indicated that they enjoyed the unit "some". About one-third of the students in four of the units said that they enjoyed the unit "a lot". However, in five of the eight units, about one-fifth of the students said that they enjoyed the unit "little". In these same five units, only about half of the students indicated that they would like other similar activities during the year.

About eighty percent or more of the students in each unit reported that they learned "a lot" or "some". However, variation among the units did occur. For example, more than 40% of the students in unit H (social studies 9) said that they learned a lot and that most of the work was new. On the other hand, somewhat more than 10% of the students in unit G (English 7, Who Am I?) expressed similar feelings about how much they learned. Fourteen percent of the students in unit G reported that most of the work in the unit was new, 59% said about half of the work was new, and 27% said most of the work was on things they already knew. On the other units, the percentage of students who said that most of the work was new ranged from 24 to 44%.

In addition to the seven items that were standard on all student unit-reaction questionnaires, each questionnaire had 3-6 items unique to the particular unit. A sample of some of these items is given in Table 14 on page 31. In general, the students expressed the perception that they had a better understanding of career-related concepts as a result of working on the curriculum units. For example, 66% of the seventh graders in the Exploring Clusters unit indicated that they had a better understanding of the skills, abilities, and talents they possess that affect their future life choices.

What were the teachers' reactions to the curriculum units? Part of the curriculum development process was to involve the participating teachers in all phases of the unit evaluation, from setting objectives to developing student evaluation measures to reviewing the evaluation results. After field testing a unit, the teachers and project staff spent a half day reviewing and evaluating the unit. The project director indicated that teacher response to the curriculum was positive and that interest in continuing with career education curriculum was favorable. The evaluator shared these perceptions of teachers' feelings after meeting with curriculum writers many times during the project year.

Table 14

Student Perceptions of Benefits from a Sample of Curriculum Units

Indicate whether or not you have a better understanding of the following things as a result of working on this unit	Yes	No	Not Sure
<u>Exploring Clusters - English Grade 7</u>			
The terms: career, job, occupation leisure time	78%	7%	15%
The skills, abilities, and talents you possess that affect your future life choices	66	12	22
<u>Social Studies - Grade 9</u>			
Your goals toward a future career	70	13	17
The importance of planning for possible futures	84	9	7
<u>Home Economics - Grade 7</u>			
Your talents, interests, and needs	76	9	15
How choices you make now influence your future	65	18	18
<u>Significant Others - English Grade 8</u>			
How others influence my decision making	80	11	9
Who the important people are in my life	81	10	9
<u>Who Am I - English Grade 7</u>			
The terms: values, personality, interests	61	10	29
My own likes and dislikes	63	27	10
Expressing my own feelings in prose and poetry	41	22	37
<u>Science - Grade 9</u>			
Science processes are used in all careers	55	14	32
One does not have to be in a laboratory to use science	80	12	8

These favorable views of teacher reactions to the curriculum were supported by the teachers' response to a questionnaire completed after field testing. Seventy-eight percent of teachers said that they would like to teach the curriculum unit again next year, 11% said they were not sure, and 11% said they would not like to teach it again (Table 15 on page 33). About one-third of the teachers indicated that their attitude toward career education became more positive as a result of teaching the curriculum unit.

Student-Centered Career Maturity Measurement

One of the proposed project activities was to develop activities that would involve the students in measuring the attainment of the career-maturity objectives. The long range goal of the student-centered career maturity measurement program was to have a K-12 student developed resume, or portfolio of competencies in the five goal areas for students.

To what extent was the student-centered process put into action during the 1975-76 school year? The project staff worked with staff members at two schools to develop the student-centered process. Project staff helped a senior high social studies teacher develop, organize, and sequence student activities for a one-semester careers class. Thirteen activities, with at least two in each of the five student goal areas, were put together in a package for dissemination. About half of the activities were newly developed this year, and some were modifications of activities the teacher used previously. Unfortunately the class was scheduled for the first semester only. Time was not available to adequately field test all of the activities.

Table 16 shows the students' reactions to three of the career development activities (see page 34). The activity titled "Things I Find Important" was fairly popular with the students, while the activity labeled "Looking at Career Decisions" was rated "so-so" by 61% of the students. The most common criticisms made by students were that the activities were not interesting or that they did not learn anything new.

The project staff also met with four junior high teachers who were participating in a teacher-advisor program. Assistance to the teacher-advisors was focused on the use of group activities related to career maturity measurement.

Table 15
Teacher Reactions to the Curriculum Units after Field Testing
(N=27)

Question	Response	Percent
1. The format, objectives and learning activities in this mini-unit were	Clear Somewhat unclear Confusing	90% 11 0
2. Was this mini-unit appropriate for the grade level?	Yes No	85 15
3. Would you like to teach this mini-unit again next year?	Yes No Not Sure	78 11 11
4. In general, the amount of student learning in this unit was:	High Moderate Little	26 70 4
5. In general, student reaction to the mini-units was:	Enthusiastic Moderate interest Uninterested	48 48 4
6. As a result of teaching this mini-unit, has your attitude toward career education changed?	Yes, more positive No, has not changed Yes, more negative	37 63 0

Table 16

Senior High Student Reactions to the Career Maturity Measurement Activities

Activity	Met All Expectations	OK	So-So	Don't Do It Again
Looking at Career Decisions (Goal Area-Decision Making)	6%	28%	61%	6%
Things I find Important (Goal Area-Self Awareness)	41	41	18	0
Career Planning (Goal Area-Self Awareness)	14	41	36	9

The development of the student-centered career maturity measurement component was not a high priority item, nor does the project director feel it should be until further pilot testing indicates its feasibility. According to the project director, a necessary condition for the success of the component is the development of an effective delivery system.

Resource Centers

The project proposal indicated that career resource centers would be established in three schools to serve career development needs of each school. Career learning centers (CLC) were established at two junior highs (Fairview and Parkview) and one senior high (Kellogg). Each CLC was staffed by a career counseling aide (a paraprofessional position, although all aides had college degrees) who worked six hours a day.

What activities took place in the three career learning centers? The CLC career counseling aides kept daily logs of CLC activities from late October, 1975, to mid May, 1976, in four general areas:

- A Student use of the career learning center without direct assistance from the career counseling aide
- B Teacher use of the career learning center without direct assistance from the career counseling aide
- C Career counseling aide use of time and direct contacts with students and staff

D Community contacts with the career learning center

Table 17 on page 36 shows the CLC weekly use averages for each of the three schools for specific activities in each of the four general areas. In area A, the average number of students who used the CLC each week without direct assistance from the career counseling aide ranged from 31.4 students at Parkview to 48.6 students at Fairview. About one-third to half of these students were using the CLC as part of a classroom assignment.

The average weekly number of staff members who used the CLC without direct help from career counseling aide (area B) ranged from 2.3 staff members at Kellogg to 6.2 at Parkview.

The career counseling aides had a substantial number of working contacts with students and staff (area C), particularly at the junior high schools (Fairview and Parkview). The career counseling aide at Fairview indicated a weekly average of 25.6 brief contacts with teachers and other staff outside the CLC. The weekly average of brief staff contacts was 16.9 at Parkview and 4.9 at Kellogg. The career counseling aides at Fairview and Parkview also had a weekly average of about six more substantial working contacts with staff members.

The career counseling aide at Kellogg worked with an average of 6.4 individual students each week in the CLC. At Fairview the weekly average was 5.5 students, and at Parkview it was 20.5. At Fairview and Parkview, about 2 to 3 groups of students worked with the career counseling aide in the CLC every day. Very few groups of students worked with the career counseling aide at the senior high level; although the aide worked in classrooms about once every two weeks.

Career counseling aide contacts with the community ranged from a weekly average of 2.6 contacts at Parkview to 11.6 contacts at Fairview.

How do students and staff perceive the value of the career resource center services? The evaluation design called for the administration of questionnaires and interviews with a sample of students and staff who used the resource centers. An increased allocation of evaluation resources to other components of the project precluded the completion of these activities. However, the planned interviews with the three career counseling aides were conducted.

Career Learning Center Weekly Use Averages

Activity		Fairview 27 Weeks	Parkview 25 Weeks	Kellogg 27 Weeks
A	Number of students who used CLC as part of classroom assignment	10.5	11.9	18.3
	Number of students who used CLC not as part of classroom assignment	35.0	15.1	15.8
	Number of students who used CLC; classroom assignment unknown	3.1	4.4	2.3
B	Number of teachers who used CLC; no students	2.9	4.2	0.6
	Number of teachers who used CLC with students	0.6 Teachers 6.2 St/Tchr	1.2 Teachers 2.5 St/Tchr	0.2 Teachers 4.2 St/Tchr
	Number of other staff who used CLC	0.5	1.8	1.5
C	Number of brief aide contacts with teachers outside CLC	13.2	14.8	3.9
	Number of brief aide contacts with other staff outside CLC	12.4	2.1	1.0
	Number of staff aide worked with in CLC	3.0	2.8	0.9
	Number of staff aide worked with outside CLC	2.6	3.4	0.8
	Hours aide gathered material for staff	6.0	2.2	3.2
	Number of individual students that aide worked with:			
	Inside CLC	5.5	20.5	6.4
	Outside CLC	0.1	2.4	0.1
	Number of groups of students that aide worked with:			
	Inside CLC (No. Groups <u>Avg. No. Stud.)</u> Group	(11.4) (5.2)	(13.8) (4.6)	(0.1) (7.0)
Outside CLC (No. Groups <u>Avg. No. Stud.)</u> Group	(0.4) (9.4)	(0.1) (6.0)	(0.6) (25.5)	
D	Number of aide contacts with community	11.6	2.6	5.5
	Number of community visits to CLC	2.7	0.5	0.5

- 36 -

The interviews with the career counseling aides clarified the differences among the usage figures at the three centers, particularly between the two junior highs and the senior high. Apparently many of the students at Kellogg Senior High did not have any unstructured time during the school day to use the career learning center. Student contacts were usually made between classes. Little time was available for working extensively with the students. The aide's major contact with students involved showing students where materials, such as the college catalogues, were located.

The students at the junior high schools had more study hall, or unstructured, time that could be spent in the career learning center. Contacts between the career counseling aides and many students at Fairview and Parkview went beyond information giving. Both aides used career education activities in the areas of self-awareness and career exploration. The aides also had frequent contacts with several students that could be labeled as individual career education counseling.

Although the career counseling aide at Kellogg worked with a few teachers in their classrooms with career education activities, the junior high career specialists apparently had more contacts with staff members. Part of this junior-senior high difference may be due to differences between the teachers at each level. However, the differences also may be partially due to the different philosophies of the career counseling aides. Both junior high aides felt that the program could be improved if they became more involved with staff members and actually sought out their cooperation. They viewed their position as a professional job requiring a full-time person. On the other hand, the aide at Kellogg would go along with greater involvement with staff members, but was satisfied with the CLC as it operated this past year. She viewed her position as more of an avocation than a career job and does not want it to become a "professional" job.

Student Outcomes

As indicated previously, five major student outcomes were identified in the project proposal: more positive self-concept (increased self-awareness), greater awareness and knowledge of decision-making skills and consequences, increased knowledge of life-style options (including

career and occupational choices), improved interpersonal skills (communication, group dynamics, cooperation), and improved attitudes toward careers and work.

Did the students who participated in the project activities show improvement in the identified student outcome areas? The evaluator and the project staff spent many hours discussing the most appropriate way to collect information that would answer this question. The two major concerns were the identification of the student population that would be measured and the type of measuring instrument. Since the project activities, such as the career education curriculum, were in a developmental stage, it was not possible to identify one group of students that would be exposed to (or treated by) project activities related to all, or many, of the five goal areas. Therefore, it was not feasible, and self-defeating from an evaluation viewpoint, to administer a pretest and a posttest that covered all student outcomes to one sample of students. Not only would the exposure of one student to activities in all goal areas be limited, it was not possible at the beginning of the year to determine which students would be involved in project activities.

It was decided that the most logical strategy at this phase of the project was to measure outcomes for groups of students who definitely participated in the project. Students who participated in field testing the career education curriculum units were the major source of target populations. The project staff, assisted by the evaluator, developed a separate instrument for each curriculum unit that included items specific to the goal areas that were addressed by the unit. Most of the items on each instrument were developed by the project and supplemented by items from commercial instruments when appropriate. In general, many of the scales and items on the more popular commercial measures of career development did not appear to be related to the project's student outcome objectives.

The evaluation design also indicated that case studies would be conducted for several students who participated in the student-centered career maturity measurement component of the project. The case studies were not completed because individual students were not involved to a

great enough extent to have a substantial amount of data related to their growth in the identified student outcome areas.

Did the measures of student outcomes for the curriculum units show student gains in the goal areas? Since twenty different instruments were developed for twenty curriculum units that were field tested, space and resources did not permit the reporting of all results. Two units will be selected as representative of the procedure and results that were obtained.

Personal Decision-Making Skills. The general goal of this one-to-two week unit was "to develop decision making skills and an awareness of the results of decisions which gives the student a sense of destiny control." It was taught by three seventh grade english teachers. A test was developed to measure the specific student outcomes of the unit and was administered on a pretest-posttest basis to students who participated in the unit and to a control group. The results of the student testing are shown in Table 18 on page 40.

In general, there was little difference between the responses of the experimental group of students on the pretest and posttest. On most items, a large proportion of the students responded in the appropriate direction on both the pretest and posttest. Most of the students felt that decision-making was important at all ages and they appeared to be familiar with the basic steps of good decision-making behavior; e.g. a step-by-step process, consideration of all alternatives. The greatest change occurred on the item: "I don't think that I will make any important decisions today." Thirty-two percent of the students agreed with this item on the posttest, compared with 54% on the pretest.

Several factors may account for the lack of change between the pretest and posttest on most of the items. Perhaps a major factor was the short amount of exposure time to the curriculum activities. It would probably be unlikely that the constructs underlying many items, such as the items tapping locus of control, would be altered as a result of a brief treatment. It also is possible that the items may not have measured the content of the curriculum unit, or that the item may not have been specific enough to measure student changes. As mentioned previously, several of the items were answered "correctly" by most of the students

Table 18

Student Pretest and Posttest Results on the Seventh Grade
Personal Decision-Making Skills Curriculum Unit
(Percent Agree)^a

Question	Treatment N=170		Control N=45	
	Pre	Post	Pre	Post
Before making a decision one should consider all of the alternatives	100	100	98	98
The decisions that a teenager makes do not usually affect his/her future	19	12	18	14
I don't think that I will make any important decisions today	54	32	24	28
People have a lot of control over what happens to them	81	82	71	77
Wise decision-making follows a step-by-step process	81	88	78	93
Getting up in the morning is an example of a conscious decision	65	60	69	78
There are usually only two choices or alternatives to choose from when making a decision	31	25	56	42
I am confident that I can make a good decision if a problem situation were to come up	85	93	82	92
Things happen to us mostly by chance	28	29	42	36
I won't have to make many important decisions until I finish high school	7	6	9	0
An important part of decision-making is to know what you want to accomplish	99	96	95	93

^a The total percentage of students who either strongly agreed or agreed with the statement.

Table 18 (continued) Personal Decision-Making Skills

Question	Treatment N=170		Control N=45	
	Pre	Post	Pre	Post
People of different ages make different decisions	94	95	96	98
Knowing how to plan and make decisions can be a helpful skill	99	98	91	98
Planning and career decision-making is something you do all through your life	84	85	71	80
The decisions you make now may have a big effect on your life in later years	86	87	87	84
One of the steps in good decision-making is to consider the results of following a certain course of action	95	97	90	86
I don't know how to go about making decisions	7	4	10	11
Only adults make important decisions	1	2	2	2
One should go through the same steps when making any kind of decision	47	51	41	44
A decision you make today might be changed tomorrow	94	96	98	96
It's a waste of effort to try to plan your life because so many things happen just by chance	42	40	43	53
Once you reach fifty years of age, there are not many more decisions to make	7	3	9	9

on the pretest. This does not necessarily mean that the items were inappropriate, but possibly that the students were already familiar with some of the curriculum material..

Foreign Language. Two senior high french teachers revised and taught a 45-lesson curriculum unit whose primary goals were:

- . a basic exposure to jobs related to french
- . an awareness of self and potential satisfactions and dissatisfactions with various occupations and life/styles
- . an appreciation of contributions of various occupations
- . positive attitudes related to sex roles

The results from the pretest and posttest indicated that the curriculum unit had some, but not a substantial, effect on the primary goal areas. The students in the experimental group listed an average of 6.4 french-related occupations on the posttest, compared with 5.5 on the pretest (Table 19 on page 43). Some evidence suggested that the students' became more appreciative of contributions of various occupations. For example, on the pretest, 69% of the students strongly agreed that "all honest work, whatever it may be, deserves recognition." On the posttest, 85% of the students strongly agreed with that statement. Some slight favorable changes also occurred on the items measuring attitudes toward sex roles. However, almost all of the students had favorable attitudes on most of these items before participation in the unit . activities, making it difficult to show substantial positive changes.

Did the participants' awareness of self and awareness potential satisfactions and dissatisfactions with various occupations and life styles increase as a result of the curriculum unit? Students were asked to indicate the importance of a number of job characteristics before and after participation in the unit. Changes between the pretest and posttest were not substantial (Table 20 on page 44). Generally, a similar percentage of students rated the characteristic as very important on both the pretest and posttest. These findings do not preclude the possibility that participants may have become more aware of themselves in relation to various occupations and life styles, but that any changes that may have occurred were not general enough to be picked up by the items included in the test instrument.

Table 19
Pretest and Posttest Results for Foreign Language Students

Question	Response	Experimental N=59		Control N=20	
		Pre	Post	Pre	Post
Name 10 occupations that require a knowledge of French	Mean number of occupations	5.5	6.4	4.9	4.8
What do you plan to do after you graduate from high school?	Find a full-time job	2%	2%	0%	0%
	Get married, but not work	2	0	0	0
	Go to technical-business school	6	8	0	0
	Go to college	82	81	95	90
	None of the above	7	7	0	0
	Undecided	2	2	5	10
How certain are you of these plans?	Very certain	77%	91%	68%	68%
	Somewhat certain	18	9	32	21
	Uncertain	5	0	0	11
All honest work, whatever it may be, deserves recognition	SA	69%	85%	60%	60%
	A	31	14	35	40
Cashiers at a store can be just as proud of their work as doctors can of their work	SA	46	54	35	45
	A	46	41	55	45
A woman who works full-time outside of the home cannot be as good a mother to her grade school age children as one who stays at home	SA	16	16	10	20
	A	31	26	40	40
Any woman, married or single, should receive the same pay for a particular job as a man would	SA	66	74	65	60
	A	32	26	30	30
Career planning after high school is not as important for a girl as a boy	SA	0	0	0	0
	A	5	2	0	11
Girls should feel free to become auto mechanics if that is what they would like to do	SA	58	65	50	45
	A	39	35	50	55

Table 20

Importance of Job Characteristics as Perceived by Foreign Language Students

Indicate how important each of the following items will be to you in selecting your future job or occupation	Experimental N=59				Control N=20			
	Pre		Post		Pre		Post	
	Very Impt	Very Impt	Very Impt	Very Impt	Very Impt	Very Impt	Very Impt	Very Impt
I could do something that makes use of my abilities	68%	32%	79%	21%	75%	25%	80%	20%
The job could give me a sense of accomplishment	85	15	81	19	80	20	80	20
I could be busy all the time	9	67	12	54	20	45	20	55
I could be in charge or tell people what to do	3	17	3	22	10	25	5	25
I could make lots of money	15	44	9	44	15	65	15	65
My co-workers would be easy to make friends with	58	42	61	37	70	30	55	40
The job would be challenging	61	36	60	36	50	50	55	45
I could try out some of my own ideas	54	39	52	29	45	50	45	45
I could work alone on the job	3	27	0	23	5	45	5	10
I could get recognition from other people for the work I do	19	49	28	45	20	80	20	70
I could make decisions on my own	20	61	25	63	45	55	40	55
The job would provide for steady employment	42	51	47	46	70	25	60	40
I could do things for other people	38	60	48	48	35	55	30	60
I could be "somebody" in the community	15	53	14	40	30	55	16	53
I could do something different every day	12	47	17	36	0	70	0	55
I could follow orders rather than give orders	2	22	5	24	0	20	0	11
I would have a set work schedule (like 8 to 5) every weekday, with no evening work necessary	14	27	3	28	5	25	0	32
I could control my own work schedule	8	56	22	33	20	60	10	40
I would like a job traditionally performed by someone of the opposite sex	2	10	2	2	0	5	0	5

Did the project staff and evaluator develop a junior high level and a senior high level test instrument that measures student outcomes identified in the Roseville Secondary Career Education Project? At the beginning of the year it did not appear that any local or commercial instruments were available that adequately measured the project's student outcomes. It was hoped that two instruments (one junior high, one senior high) could be constructed by the end of the year to measure the student outcomes. The sources of items would include the curriculum unit instruments, commercial instruments, and Roseville instruments developed in previous years. Roseville would then have instruments that could be used to conduct an appropriate district-wide assessment of their career education goals for students.

Although a large pool of items has been collected, time has not been available to construct even a rough draft of the proposed instruments.

ANTICIPATED CHANGES AND/OR PROBLEMS

The first year of the Roseville Secondary Career Education Project was successful. The changes in Project objectives were minor, as were the problems encountered. The Project Staff worked hard and effectively in several areas. The following recommendations for Project improvement are based on the results described in this report.

1. Follow-up activities should be planned for staff members who participated in the introductory and group work skills courses. Participation in these courses appear to have a definite impact on their willingness to be involved in Career Education activities. Continued support to these individuals may be an important factor in establishing a solid commitment to the Project's goals.

2. Efforts should be continued to make the curriculum units interesting to students. Some of the units were received by the students with less enthusiasm than desired. Perhaps more extensive student reaction than normally solicited would be helpful for units that did not receive highly favorable ratings on the "enjoyment" reaction items.

3. Curriculum content and activities should be coordinated by grade level and subject area. Avoidance of substantial overlap of curriculum content and activities should be a high priority. In fact, if career development at the secondary level is truly developmental, it should be possible to state objectives within each student outcome area that follow developmental "stages" across grade levels.

4. Related to numbers (2) and (3), efforts should be continued to have curriculum content that is appropriate to the students' developmental level. On several units, the students had the desired attitude or knowledge on the pre-test. On other units, a substantial proportion of the students indicated that the material was not new.

5. The purpose of the Career Learning Center at the senior high level should be reviewed. If it is to serve a more extensive function than an information base for future occupational and educational plans, activities should be planned that would allow the center to play a greater role in the students' career development.

6. The Project Staff should continue with their efforts to locate or develop test items that measure the Project's student outcomes. It should be possible to develop measures that could be used for district-wide assessment of student career development or maturity.

7. Community resources should be explored further. The internship-exchange program was rated highly by both staff and community. More activities in this area should be developed, including opportunities for student-community interaction.

DISSEMINATION

Project awareness was disseminated by the Roseville School District at the time its funding was first announced by the federal government in July of 1975. Articles appeared at that time in the St. Paul Dispatch (area daily) and the Roseville Sun (suburban weekly). (Copies of publicity comprise Appendix A). Career Education within the District has received considerable publicity in the local press since the first programs were begun prior to 1971 and before the adoption of the term "Career Education".

Since the initial announcement of the funding of this Project, the following dissemination has been undertaken by the Project Staff itself:

1. Four newsletters detailing the Project's various involvements, their current status, and information regarding opportunity for participation, were sent to all secondary school staff members and district personnel, plus all elementary principals and special services staff members during the 1975-76 school year. Reactions, favorable and unfavorable, were received, indicating that it was read, which was the objective of the newsletter - to make staff aware of the Project's existence and the opportunities offered them. (Copies of newsletters are included in Appendix A).

2. On November 24, 1975, and July 12, 1976, the Project Director and Facilitator spoke to the Roseville Rotary on the nature of the Project and the expected outcomes. At the end of the first meeting, members volunteered for several task forces then being formed. This was followed by several volunteers becoming actively involved in assisting on such projects as creating an Internship and Exchange Program, revising the Community Resource Directory and jointly sponsoring a Parent-Student Career Planning Workshop. The July presentation was a progress report on the first year's activities and plans for the second year.

3. The January issue of "Quest", a Roseville Area School District publication mailed to all community residents, featured the Project Staff in an article and picture. The article, while sketching the goals of the Project, also publicized an upcoming Parent-Student Career Planning Workshop held on February 26, 1976. (See Appendix A).

4. Publicity relating to the Parent-Student Career Planning Workshop was also placed in area daily and weekly newspapers (sample article included in Appendix A), and on the radio. Person to person telephone campaigns were carried out through the parent organizations at the junior high level.

5. Mention of the Project and project personnel was made in school newspapers, particularly in the buildings that housed the Project's three Career Learning Centers. (See Appendix A).

6. School newsletters to parents have mentioned the Project, as have letters from Guidance Counselors. (See Appendix A).

7. The dominant area daily newspaper wrote a feature article on the Project's Internship-Exchange Program. This article generated much interest in this program and the Project, both in the school and the community.

8. A brochure was prepared by the Project Staff, dealing with components of the Project, definitions of Career Education, the need for Career Education, materials being created through Project efforts, and a sign-up blank for people interested in being involved in the career development of Roseville students. This brochure will be sent to all parents of students in the Roseville Area Schools District. In addition, copies have been sent to Minnesota State Department of Education staff members, all district certificated school staff members and national Career Education leaders. Copies are also available at all workshops and presentations made by the Project Staff or the Coordinator of Occupational Education.

g. Memos have been sent to all school staff members announcing:

- 1) the Internship-Exchange Program, 2) materials budget requests, 3) Workshops (at applicable times during the year), and 4) curriculum writing opportunities.

Individuals associated with the Project have had opportunities to make presentations on the Project as follows:

1. The Project Director has made two presentations to counselors in the St. Paul School District; one to a Career Education class at St. Thomas College in St. Paul; to the Mid-Winter Conference of the Minnesota Personnel Guidance Association in St. Paul; to the American Personnel and Guidance Conference in Chicago; to a Career Development Conference at Mankato State College, Mankato, Minnesota; to the Minnesota Counselor's Association; and the Metro Area Health Educators Association. The Director was also asked to write a Project Profile for the Pupil Personnel Services Journal, Minnesota Department of Education (Vol. 5, Number 2, 1976).

2. The Project Director and District Coordinator of Occupational Education reported on the Project's objectives and major components to the State Advisory Research Coordination Unit of the State Department of Education in December.

3. The Project Director and one Career Learning Center Specialist participated in the six-state Educational Testing Service Consortium on decision-making and employability skills in November. The Project Director then went to Princeton, New Jersey, to participate in creating measuring instruments in mid-December.

4. The Project Director and Project Consultants presented a Project Profile and Workshop for the staff of the New Trier High School, Winnetka, Illinois, in November.

5. The Project secretary took part in a "Career Education and Parents" mini-conference at the Ohio State University in Columbus on October 27th and 28th, conducted by Dr. Kenneth B. Hoyt, Office of Career Education, U.S.O.E.

6. Project consultants and writers of curriculum have presented fifteen workshops and project descriptions to various audiences, mainly school staffs in other school districts.

7. To date, 73 requests for project materials have been received. This includes copies of the Project itself and Roseville produced curriculum materials. Numerous telephone calls requesting information and assistance have been handled by Project Staff.

8. The Coordinator of Occupational Education has discussed the Project and the scope of Career Education in Roseville at the State of Minnesota Association of Secondary Vocational Administrators, Minnesota Instructional Materials Center, White Bear Lake Minnesota; at the District School Board meeting, to which the public is invited to attend; and to the entire Social Studies Department of the White Bear Schools.

9. An 80-minute presentation to Roseville School Staff on Career Education resource materials and the Career Learning Centers was made February 23, 1976, during a district-wide in-service day. The presentation was made by the Project Director, Facilitator and two Career Learning Center Specialists.

10. A one evening "Parent-Student Career Planning Workshop" was held on February 26, 1976, with a variety of activities including panel discussions, descriptions of school testing programs, post high opportunities and "Futures". This event was co-sponsored by the Roseville Rotary, Chamber of Commerce, union representatives, PTA and concerned parent groups. Approximately 200 parents and students attended.

11. A 15-minute sound-slide presentation was put together by Maureen Twining, Career Learning Center Specialist at Parkview Junior High, highlighting the materials and services available in the Career Learning Centers. This popular program has been used to describe this aspect of the Project to the Community Advisory Committee, the School Board, at staff credit workshops and numerous parent and school group meetings. In the classroom it has been used as an introduction to the centers and orientation sessions for Vocation and Career Education units. It is used in the center with small groups to show them where they can find specific information they are seeking.

12. Career Learning Specialists have been asked to describe the services of the Career Learning Centers at meetings of the PTA, school faculties and other parent groups.

13. The Minnesota Instructional Materials Center has published Roseville's project information in their newsletter which is distributed statewide and to regional career information centers across the country.

Results of the above described dissemination efforts have proven successful in that concrete community assistance has materialized when requested. Some also has been volunteered. This support, particularly from the business community, has proven valuable in organizing several of the Project's proposed thrust areas—staff development opportunities for career role exchanges, revising the Resource Directory and locating people to assist on task force committees and to come into the classroom as resource people. Many valuable contacts among influential businessmen will create, and in some cases already has created, a closer and friendlier relationship between the school and business people involved. It is hoped that this will permeate other facets of the business community and school community relationships, thus proving that Career Education can be a catalyst in building bridges.

Another result of this publicity has been seen in the Career Learning Center usage. After every presentation made to parent groups, students who have never

used the Career Learning Center before have come in at their parents' suggestion. Several adults have contacted the project office requesting information or services available in the Career Learning Center and have been assisted with career related problems - their own and their childrens'.

Special emphasis will be given to informing parents of the Career Education program and activities during the fall of 1976 so that they may use the services themselves, or encourage their children to do so.

Curriculum materials and special program abstracts which have been produced as a result of the Project will be available after September of 1976, on a cost-recovery basis. These materials include:

- A description of the School-Community Resource Directory delivery system

- A description of the School-Community Exchange Program

- A set of Student Centered Career Maturity Measurement activities for senior high students

- Two 9th grade career related Mathematics units

- A set of senior high English career related units:

TV Production	Interaction
Writing	Oral Communication
Western Hero	

- A 7th and 8th grade career related Reading unit

- Social Studies career related units at the 7th, 9th and 12th grade levels

- Industrial Arts career related units at the junior high level

- Career related mini-units in Art, grades 7 - 12

- Home Economics career related units for grades 7 - 12

- Language Arts career related units for grades 7 - 9

- Foreign Language career related units for grades 11 and 12

- A Teacher-Advisor Handbook for junior high teachers

- A one-quarter class in Career Education for 11th and 12th graders

SPECIAL ACTIVITIES

Efforts were made by the Secondary Career Education Project Staff to deal with special problems often existing in school and community. These problems include racial and sexual stereotyping and how to include the educable mentally handicapped in the on-going curriculum, particularly as it related to Career Education.

The following steps were taken to recognize and deal with these problems:

1. The District's Human Relations staff independently reviewed Project produced or field tested curriculum materials before final publication and dissemination to help eliminate sex role or racial stereotyping.

2. Curriculum units dealing with sex role stereotyping have been written and field tested under project funding in the following areas:

Eighth grade English: "Women and the World of Work"

Senior High Foreign Languages: "Stereotyping"

Several Teacher-Advisor activities at the Junior High level

3. Curriculum units dealing with racial stereotyping have been written and field tested through project funding in the following area:

Senior High Art: "Contributions of Native Americans"

4. Career Education Curriculum Guides for the educable mentally retarded were implemented in the Junior and Senior high schools.

5. Materials have been purchased by the Project for dissemination through the Career Learning Centers dealing with these problems. Some of these materials include:

"Non-Traditional Careers for Women" - sound filmstrip

"Who's Prejudiced?" - pamphlets distributed to all Career Learning Centers and Guidance Personnel

6. Our Project Consultant, who plays a national role in women's development, advised the Secondary Career Education Project on programs and development.

7. The problem of sexual stereotyping is a component of the Introductory Career Education Workshop sponsored by the Project for Roseville Staff members and was considered during the 3-hour "Special Needs" session of that workshop. Fifty-five staff members participated in these workshops.

A B S T R A C T

CAREER EDUCATION PERFORMANCE REPORT

PROJECT NO.	554AH50058
GRANT NO.	G-007503738
NATURE OF REPORT	Final Report
PROJECT TITLE	A Career Education Model Plan for Effecting Incremental Change in a Local School System.
PERIOD COVERED BY THIS REPORT	July 1, 1975 through June 29, 1976
CATEGORY OF PROJECT	Incremental Improvement
PROJECT DIRECTOR	Dr. Arland N. Benson
GRANTEE	Roseville Area Schools Independent School District #623 1251 West County Road B-2 Roseville, Minnesota 55113
TELEPHONE	612-633-8150

REPORT ABSTRACT

The Roseville Area Schools' Secondary Career Education Project completed its first year of operation in June 1976 with U.S. Office of Education funds of \$105,188. The goals of the Project were based on a broad definition of Career Education which emphasized career development as a lifelong process.

About thirty community members, students and district staff participated on project advisory or task force committees. Almost all of the members felt that their committee served a useful purpose and that they were given sufficient opportunity to express their views.

About one-third of the professional certificated district staff members participated in at least one of the staff development options. One-hundred-nine staff members enrolled in two-credit college courses taught by the Project Director: Introductory Career Education, Group Work Skills and Teacher-Advisor Skills. Participant reactions and pre-post measures of course objectives indicated substantial participant benefits: familiarity with career development concepts, models and resources for implementing Career Education; understanding group dynamics, group work techniques and interpersonal relationships. The course participants also said that they felt more positive towards Career Education and the use of related skills as a result of taking the credit courses. Five months after taking the courses, a substantial majority of participants indicated greater activity in the following areas: development of curriculum lessons, teaching Career Education lessons and the use of specific group work skills.

Twenty-three staff members participated in an internship-exchange program that allowed them to spend from 1-10 days in a non-school setting, such as a business or community agency. After participation, almost all of the interns felt that their experience would help the career development of their students.

A major component of the Project was to develop and field test a grade 7-12 Career Education curriculum that would contribute to the attainment of the five student outcome objectives. Sixty-four staff members were involved in the development and/or field testing of Career Education curriculum. A total of 765 class lessons were developed that covered all five student outcome areas at both the Junior high and Senior high level.

Student reactions to the curriculum units varied among the different units. Generally about half of the students indicated that they enjoyed the unit "some". The percentage of students who said that they enjoyed the unit "a lot" ranged from about ten to fifty percent. The proportion of students who said that most of the work was "new" ranged from about half to one-sixth.

About eighty percent or more of the students reported that they learned "a lot" or "some". In general, the students expressed the perception that they had a better understanding of career-related concepts as a result of working on the curriculum units. For example, 84% of the students in the ninth grade Social Studies unit said that they had a better understanding of the importance of planning for possible futures.

Attainment of student outcomes also was measured by testing the students before and after the curriculum units with an instrument specifically developed for each unit. In general, the results of this testing indicated little difference between the student responses on the pre-test and post-test. Several factors were noted which may have accounted for the lack of change: short exposure time, inappropriate content of items and high scores on the pre-test.

Teacher reactions to the Career Education curriculum were favorable. Three-fourths of the teachers said that they would like to teach the curriculum unit again next year, and one-third indicated that their attitude toward Career Education became more positive as a result of teaching the unit.

Career Learning Centers (CLC) were established in two Junior high schools and one Senior high. Each CLC was staffed by a Career Counseling Aide. The Career Counseling Aides reported a substantial number of working contacts with students and staff, particularly at the Junior high centers. For example, at one Junior high, the Aide worked with 2 or 3 groups of students every day and an average of twenty individual students a week. The same Aide's contacts with staff members averaged more than twenty per week. In addition, more than thirty students used the CLC each week without direct assistance from the Aide.

Efforts were made to deal with problems of racial and sexual stereotyping and mainstreaming of the handicapped. Curriculum units were developed in the areas of stereotyping and materials were purchased for the CLC's specifically dealing with these problems.

the Statesman Bi-Weekly

Volume 6, Number 12

Frank B. Kellogg Senior High School

Wednesday, October 22nd,

St. Paul Dispatch

Tues., July 15, '75

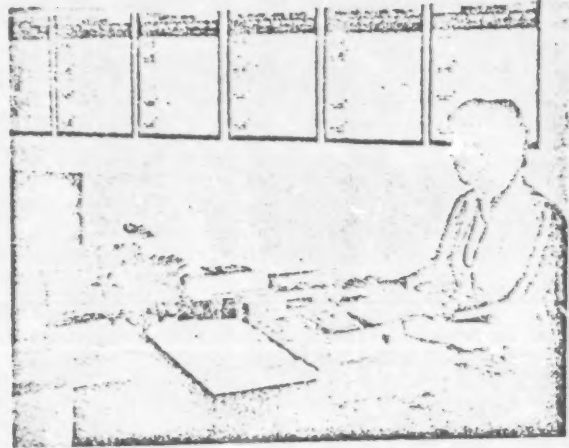
District 623 awarded grant

A grant of \$105,188 has been awarded to Roseville School District 623 by the U.S. Office of Education to develop a model plan for career education in the secondary schools.

Vernon Vick, the district's administrative assistant for career services, said the funds will be used for staff training through courses and internships and for the establishment of career resource centers in the schools. The centers will be staffed by career counseling aides and will provide advice on students' career interests and programs.

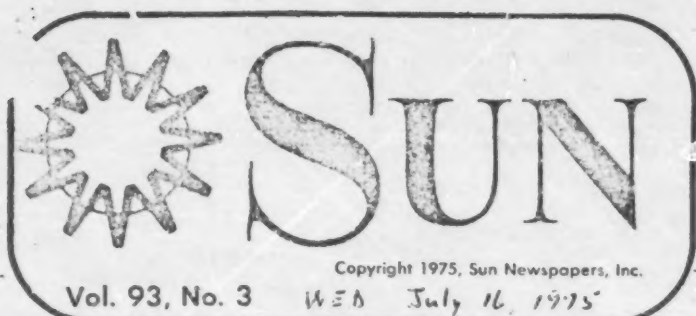
Staff working on the project will develop career "learning packages" to be incorporated into the schools' curriculum.

Vick said District 623 is the only Minnesota school district to receive federal funds for career education.



The Career Education Center in the lower level of the IMC is "to help students become more aware of job possibilities" Virginia Bauman, who is in charge of it explained, "it is a more casual 'drop in' place where kids can check out materials and explore different possibilities before they go to their counselors."

It is part of a federaly funded project which also involves new curriculum writing and workshops for teachers. There are also centers at Fairview and Parkview, if the project is successful it may be adopted by the entire school district.



Schools receive \$105,000 grant

The United States Office of Education has announced that the Roseville Area Schools will receive a grant of \$105,000 for fiscal year 1975-76 to develop a career education model plan at the secondary school level.

Vernon Vick, administrative assistant for career services in the Roseville Area Schools, said that the district was the only one in Minnesota to receive federal funding for career education.

"These funds," Vick said, "will be used to accelerate the district plans to integrate the concepts of career education into the curriculum at the secondary level."

The funds will be used for inservice training of the teaching staff through graduate courses at the University of Minnesota, work role exchanges for administrators, teachers and other staff members, exchanges between district staff and members of the business community and for internships for the staff in business and community fields.

"A significant portion of the funds will be used to establish career resource centers in the secondary buildings to be staffed by career counseling aides. The centers diagnose and analyze student career interests and recommend programs for the individual student's career development," Vick said in a press release.

Teachers will develop career-related learning packages to be incorporated as part of the present curriculum.



THE FIRST OF 2,000 copies of a junior high "career related science unit" was presented to the State Department of Education in December. Accepting for the Department was Commissioner of Education, Howard B. Casmey. Roy Hegler, director of customer engineering, Sperry-Univac (second from left), made the presentation as Bob Madson, director of operations for the State Department's Vo-Tech division (left) and Burleigh Saunders, manager of administrative services at Sperry-Univac, looked on. Saunders, a former chairman of the state advisory council on vocational education, helped arrange for the printing of the guide, which uses science experiments with examples of everyday application of the principles of science and helps students and teachers better appreciate the value of education. Extra copies, if available, may be obtained from Leonard Kodet, supervisor of career education, or Dick Clark, science consultant, at the state department.

October 1975



CAREER EDUCATION PROJECT

Since our initial contact with staff during workshop week, we've been asked many times "What is Career Education?" and "Just what is your project all about?"

First of all, the Project: We seek to establish a demonstration model incorporating career education into the curriculum. At least four departments will be writing curriculum this year. By means of teacher inservice (our credit workshop is an example) we hope to help teachers in ways to incorporate an awareness of careers, career exploration, self awareness and decision making. Classroom lessons would cover such areas as: 1) What jobs are available to students of Science or Math at various levels of training? 2) How will English or Social Studies help me in a career in veterinary medicine? 3) How can I learn more about myself and what my interests are? 4) How can I learn to make sound decisions about my life and my career? 5) What kind of training do I need for the career I have chosen and where can I get it?

If the project is successful at its end, career education will be infused into all areas of the curriculum, NOT to the exclusion or lessening of other studies, and all students would be better able to enter satisfying and useful employment in the field of their choice. Thus motivation is added to the importance of each class.

RESOURCE CENTER PROGRESS

Our three career education resource people have completed their initial inservice training and are now establishing centers at Kellogg, Parkview and Fairview.

Ginny Bauman is located on the lower level of the Kellogg Media Center. Ginny is a familiar face to Kellogg staff and students alike, having taught Home Ec there, and being involved at Kellogg in various ways for several years.

Maureen Twining, 1972 Ramsey grad and 1975 Gustavus honor grad in Sociology and Psychology, is setting up the Parkview resource center. Her office and materials will be located in the Media Center. During the 9th grade career unit, she will be working with students in the Social Studies conference room.

Jane Vinger, the Fairview resource center specialist, is a relative newcomer to the Roseville scene. Jane was with the PACE program at Lexington School last year. She has previously taught junior high Music and substituted on the secondary level. Fairview's resource center is located in Room 201-B.

WHAT WILL THE RESOURCE CENTER OFFER STAFF AND STUDENTS?

Current information on thousands of careers; information on financial aid; college and vocational school catalogs; materials on decision making, self awareness and the place of work in the world; information on branches of the Armed Services; audio visual aides to further explain or explore careers; career oriented games and activities; lists of persons willing to come into your classroom for a day to answer questions about their career; lists of places you can take your students to for field trips; testing implements for determining interests; and a specialist with the time and background to help students and teachers.

Our resource center specialists will be happy to come to your classroom or help small groups of students in the center with whatever area of career education you are stressing in your class.

CURRENT AND PERTINENT:

The Career Education Credit Workshop is now filled. Interest ran high and some were turned away. We plan to offer the course again this winter, with perhaps three options. If you have any suggestions for options or inservice workshops, please contact Arland Benson or Dorothy Henriksen in the Career Education Office. Also, if you are interested in contracting to write curriculum in your area, contact Arland or Dorothy.

Department Heads Note This! As an aid for helping students make decisions during this year's early registration, consider stressing the future education and career implications of your field. The Guidance Departments and the Career Resource Centers can help you with this.

November 1975



CAREER EDUCATION PROJECT

It's been a busy "get it all together" month for the Secondary Career Education Project Staff!

The midway point has been reached in the introductory Career Education workshop. November 11th marks the end of the general session, and the sub-option on Group Skills begins the following Tuesday. Several outside speakers have addressed the class on "Futurism", "The Mini-Unit Approach to Career Ed" and "Inter-Disciplinary Approach".

The general workshop will be offered again winter quarter and at least two 2-credit sub-options will be offered at that time.

Our Project Officer, Grace Watson, Career Education Division of the Department of Health, Education and Welfare, Washington D.C., spent a day with us the 1st of October. Primarily an "impression gathering" preliminary visit, she met District Administrators visited our three resource centers and admired the perfect Minnesota fall weather.

FIELD TESTING - CURRICULUM WRITING

Three ninth grade English teachers at Fairview (Alicia Smith, Carol McElwain and Bob Pass) are already field testing career education related units. Their unit, based on the screenplay version of Bel Kaufman's "Up the Down Staircase", stresses the long and short range implications of decision-making. Five more junior high English teachers are scheduled to begin field testing units written by Roseville teachers and published by the State Department of Education (and according to many people, among the best examples of existing English-Career Ed materials!) before the holiday break.

Also waiting in the wings, are teachers who plan to field test district-created materials in senior high Foreign Language, junior and senior high Art, senior high English and junior high Science.

Any teacher interested in expanding his or her subject's career/lifestyle implications is more than welcome to earn extra \$\$\$\$ through the project by either creating the curriculum or field testing already existing units. Contact Arland or Dorothy at the project office (Room 600, Fairview; 636-0843) and we'll discuss the criteria and objectives the writing should meet. Briefly, the rates for curriculum and field testing are as follows: Curriculum Writing - five hours of curriculum writing pay per one hour lesson, plus 1 sub day per 5 lessons; Field Testing - one hour of curriculum writing pay (based on the teacher contract) per lesson, plus 1 sub day per 5 lessons. So you see the experience can be "enriching" financially as well as personally.

CONFERENCES

As another possible means of personal or professional enrichment, the project is able to help with providing funds for staff members to attend conferences and workshops. On November 14th a Decision-Making workshop will be held at Hamline

University, sponsored by the College Entrance Examination Boards. The project is sending Carolyn Fredell, Ramsey counselor; Margaret Johnson, Kellogg counselor and Dorothy Henriksen, project facilitator.

And speaking of conferences, our staff secretary Audrey Almendinger, was selected as one of 12 parents throughout the country to attend a conference entitled "Career Education and Parents" at The Ohio State University on October 27th and 28th. We asked her to write down a few of her impressions:

"Sitting around a conference table with parents from twelve states, we purposely avoided in depth discussion on forced bussing and lack of funding. As parents, we are deeply concerned with delinquency, discipline and students' moral concepts. All these problems stem from the fact that the family, in many areas, is practically non-existent. Students who are under achievers need a set of reasons for learning - reasons that are important to them. As parents, we believe that career education will at least provide the needed motivation. The five basic skills encompassed in career education are equally important to under achievers, over achievers and non achievers. Much of career education's concerns center around student attitudes and work values. These are matters that should be heavily influenced by parents. Career education is not something schools can do by themselves. It requires cooperation from the business community and the home and family.

We also discussed open-entry and open-exit changes and requirements for graduation such as survival skills. But I came back with a feeling of urgency to move now, and not wait another generation to change long range endeavors.

Will career education work? The answer will obviously vary from community to community. No one ever said that all teachers, all businessmen, all parents or all students will participate in career education. If we build our plans around probable failure, our chances for success are very small."

RESOURCE CENTERS

Materials are being acquired by our resource centers and they are all becoming busier and busier. We hope that each of you will take a few minutes and browse through the center in your school, or one near you, and see what materials are on hand and what services are offered. Not only do the gals deal with print and non-print materials and with students on a drop-in basis; they have cooked up some very interesting activities for individual students and whole classes.

Jane Vinger, Fairview resource person, has sound filmstrips and movies to aid teachers in their classes. She has also located guest speakers and spent time gathering informational handouts to enrich a banking unit in a Social Studies class. Her most resourceful activity to date is arranging a German Fair for the German class. It included movies, German crossword puzzles, information on jobs with language requirements - topped off with bratwurst to nibble on.

Ginny Bauman at Kellogg, in addition to helping students with post high school education/job investigations, has been arranging and chaperoning field trips, rounding up guest speakers and assisting field testers in locating materials. Her corner of the media center is a popular drop-in center for students.

Maureen Twining, Parkview, has brought fame and fortune to Roseville! (and dare we hope to Career Ed also?) Saturday, November 1st, Maureen was named Miss Roseville! Next step for Maureen will be competition in the Miss Minnesota contest in June. Good luck Maureen! In addition to her extra-curricular activities, Maureen assisted with the 9th grade Social Studies vocational unit and is involved in the special services program at Parkview.

Just a note here - if the gals should happen to be out of their centers when you stop in, don't give up. Stop by again or leave a note in their P.O. box. Because the project is still in the formative stages, we find that weekly staff meetings are a necessity. Sometimes we meet even more often. But please try again if you can't reach them.

MATERIALS

So far only about one-third of our funds earmarked for resource materials have been committed. (That's about \$2000 out of \$6200) There's still plenty of opportunity for you to have a voice in what is purchased - both to have on hand for student use in the centers and for materials that staff might need for writing or field testing of curriculum. Materials that can be used by more than one department and in more than one type of activity would have priority, as would material that is considered excellent by several people.

ADVISORY COMMITTEE

The project's Community Advisory Committee has met twice and is now in the process of forming task forces to tackle the areas of teacher-community exchanges, internships, community resource directory and resource center use. Volunteers are welcome to join any of the task forces, so if you're interested, please call the office.

Members of the task force and the area they represent are:

John Mattson	Ramsey	Jerry Franke	North Suburban Community
Roxanne Battle	Parkview	Bob Weisenburger	Labor Leader
Susan Gooding	Kellogg	Sue Welsch	Area Council PTA
Megan O'Brien	Capitol View	Ron Hoheisel	Parkview
Carrie Saylor	Fairview	Virginia Burton	Kellogg
Richard Skinner	St. Rose of Lime	Dorothy Henriksen	Project Staff
Vern Vick	District Center	Arland Benson	Project Staff

Meetings are open and visitors are always welcome. The next meeting is scheduled for 7:30 p.m., Thursday, November 20th, at the Roseville Professional Center. Contact the Career Ed office for more details.

In parting, here's a gem of wisdom: He who watches the clock will wind up one of the hands.

CAREER EDUCATION PROJECT

March, 1976

READ THIS NEWSLETTER!

DO NOT PASS GO

DO NOT COLLECT \$200

Until you've checked the opportunities available through the Career Education Project!

Time and budget is running out and you will have to act fast, however. Nearly all of the curriculum budget is committed with major projects underway in Senior High English, Junior High Social Studies and Junior High Home Economics. Smaller projects in other areas are also being worked on.

So if you've been thinking about a short unit in Career Education for your class, NOW is the time to act. Quickly contact Project Director, Arland Benson (636-0843) for details.

+++++

There are also just a few chances (maybe five) left to be included in the second round of Community-School Career Role Exchanges.

Reactions from those participating in the first round are enthusiastically favorable. So if you've been thinking of applying, do so NOW - don't delay. A word of advice - we would rather fund more shorter exchanges than a couple of longer ones.

Here, so you can get the flavor of the program, are a few of the exchanges or visitations now being carried on by Roseville Staff:

- .. A school administrator is observing and will soon be acting as a business administrator
- .. A Science teacher is working with an animal ecology authority at the U



- . . . Two English teachers are interning at a TV studio, a radio studio and a firm that produces commercials and documentaries so that they can bring the latest techniques back to their film production class
- . . . Two Industrial Arts teachers are observing and working in construction and graphic arts firms
- . . . Two secretaries are involved with senior citizens' organizations
- . . . An English teacher will be acting as assistant to the stage manager for an upcoming production at Children's Theatre

A reminder to the few first round applicants who don't have their Learning Contracts in: They must be in now or they will be considered with the second round applications and only as the funds are available.

+++++

The Project Staff has submitted an application for second year funding and is hopeful, but we won't know until June. One thousand applications have been received by the U.S.O.E. (3,000 were submitted last year; 81 were funded) and the funds have been cut, so the outlook is speculative to say the least.

+++++

Early April will see all of our funds committed, so if you've been waiting with an idea for Career Education materials, a curriculum proposal or a career role exchange, wait no more.

It's time for that

END OF THE YEAR WRAP-UP . . .

May, 1976

from the SECONDARY CAREER EDUCATION PROJECT

As we wrap up this year's loose ends, we'd like to share some of the accomplishments and a few of the year's highlights with you.

SCHOOL-COMMUNITY RESOURCE DIRECTORY

Next fall you will be able to bring community people into the classroom much more easily, thanks to one of the Project's task forces. This task force up-dated and revised the old Resource Guide. Designed to be a constantly growing means of locating effective career development speakers and field trip sites, the new Directory is a series of 5" x 9" index cards in a portable file drawer, organized around career clusters.

The plan is to have the teacher submit a request for a speaker or field trip site to one of the Career Learning Center Specialists (or whoever would be charged with that responsibility in your building). The directory coordinator will then locate a speaker in the file, contact him or her, confirm the date, meet the speaker and bring him/her to your class at the appointed time.

Built into the Directory system is a bi-monthly up-dating report (indicating teacher-student reaction, visual aids used by the speakers, appropriateness to grade level, etc.), so that it will contain only the names of quality speakers, who are willing to come into the school.

INTERNSHIPS AND EXCHANGES

Twenty-two staff members, including principals, teachers and secretaries, "interned" at 28 community business sites for a total of 78 days. Their internships varied from spending three weeks as assistant to the stage manager of Childrens' Theatre, to three days observing the duties of various types of business administrators at Univac, to one day observing the career education program for slow learners in the Bloomington Schools. (Hope you all saw last Tuesday's St. Paul Dispatch article on the Project.)

Reaction to this program has been extremely favorable both among school and community participants and we plan to begin the internship and exchange program right away in the fall. If we are not funded, the Roseville Rotary and North Suburban Chamber of Commerce have expressed interest in spear-heading this aspect of the project, so watch for information in the fall.

OTHER PROJECT INVOLVEMENTS

. . . By June 29th (this year's funding expiration), 36 secondary teachers will have completed writing or revising career education related curriculum with project support. Many of these units, some quarter courses, some mini-units, have already been field tested and others will be field tested next year and then disseminated to all appropriate secondary departments. Thirty-seven teachers have done field testing for the project, with some testing several mini-units.

. . . Students in all five secondary buildings have been involved in the project, either through classroom units, use of the Career Learning Centers, membership on the Advisory Committee or its various task forces.

. . . Two Roseville Social Studies teachers, Dave Grove - Kellogg and Cheryl Wilke - Fairview, along with two Roseville community businessmen participated in a Career Education - Social Studies Consortium in Milwaukee for two days last month as part of a Boulder, Colorado federally funded Career Education Project.

. . 65 Roseville staff members (and a few educators from outside the District) participated in five project-sponsored Career Education Workshops. Three workshops were held: an introductory course, a course in group skills (both offered twice) and a teacher-advisor skills course. The introductory course and other options will be offered again next year.

MATERIALS BUDGET

Our Career Education materials budget still has a few dollars in it, so those of you involved in curriculum particularly, should be examining your needs for next year. Feel free to check with us now if you have some special materials you want.

HOPE TO SEE YOU ALL IN THE FALL

Official word of the status of our funding is due June 24th. Watch local newspapers for that news.

Thanks for your cooperation this past year and have a good summer!

Arland Benson, Project Director

Dorothy Henriksen, Project Facilitator

quest

JANUARY 1976

ROSEVILLE AREA SCHOOLS Independent District No. 623

Federal Grant Sets Up Career Learning Centers

"How do I know what kind of a career I want?"

"When is the right time to begin thinking about a career?"

"What kind of education do I need for the job I want?"

"What are my interests and where do my abilities lie?"

Roseville junior and senior high school students are being given extra help in thinking about and answering these kinds of questions this year thanks to a U.S. Department of Education grant in career education given to the district.

One of 80 demonstration projects in the nation, the Roseville project is headed by Dr. Arland Benson, a guidance counselor in the district the past 11 years. The project is part of the already-established K-12 career education program.

The three main purposes of the project are 1) to establish career education centers in three of the secondary schools in the district, 2) to have a concentrated and coordinated approach to staff training, including the writing and testing of career education curriculum in the various subject areas, and 3) to explore areas in which the school and community can cooperate in preparing the student to enter the world of work.

Learning Centers have been established and staffed at Kellogg Senior High and Parkview and Fairview Junior High Schools. Students are being encouraged to use the resource in the centers either individually, in small groups or as whole classes. Center personnel are trained in administering screening tests to help the students discover their interests and abilities and also to explore the maze of possible careers in light of their own talents and interests.

Also available in the centers are both print and non-print materials on occupations, lifestyles, decision making and improving interpersonal relationships.

The centers welcome parental visits whether the parents are interested in the project as it relates to their children or want information concerning job changes for themselves.

The staff is interested in trying out new career-education-related units in its classes. Others are submitting plans for new curriculum to Dr. Benson and Dorothy Henriksen, project facilitator. Many of these teachers recently finished a four credit



MEMBERS OF THE CAREER LEARNING CENTERS STAFF. Left to right are Virginia Bauman, instructional aide at Kellogg High School; Maureen Twining, instructional aide at Parkview Junior High; Dorothy Henrikson, project facilitator; Jane Vinger, instructional aide at Fairview Junior High, and Dr. Arland Benson, project head. Seated in secretary, Audrey Almendinger.

workshop in career education presented in cooperation with the University of Minnesota.

Many of the new units deal not only with occupations but also with personal values, decision making skills, interpersonal skills and lifestyles.

A community Advisory Committee has been established to insure community-school cooperation and three task forces are currently working on ways in which the cooperation can come about.

An internship and exchange program between the school staff and community is currently being worked out in which a number of staff members could exchange roles with people from the business community. This would allow the teacher to experience the way both employers and employees function and, at the same time, allow business people to work with students.

Other task forces are concentrating on updating the community resource directory. The directory lists persons in the community willing to work with the school on the program.

A special student-parent career planning workshop will be held Feb. 26 at Parkview. Further details will be announced once the program is finalized.

APPENDIX A

Page 14 — SUN — Wed Feb. 11, 1976

Career planning workshop at Parkview Feb. 26

Six mini-sessions on career planning will be offered to junior and senior high school students and their parents at Parkview Junior High Thursday evening, Feb. 26 from 7:30 - 9:30 p.m.

A part of the Roseville Area Schools' Community Education program, the workshop is the joint effort of the school district's Secondary Career Education Project, the Roseville Rotary, Chamber of Commerce and Area PTA Council.

Joel Barker of the Minnesota Science Museum will begin the evening with a presentation on "Alternative Futures" in the school's large group room. He will discuss three possible alternative future life styles, based on possible changes in technological development. Following his presentation six 25-minute mini-session will run concurrently so that parents and students may choose to attend any three topics they are interested in.

Parents are urged to attend with their sons or daughters and all interested persons are welcome to at-

tend the session whether or not they are Roseville residents or parents.

Topics to be covered in the mini-sessions include a panel discussion on "Career Planning as a Lifelong Process" with a panel composed of persons who have changed their job role one or more times during their lifetimes.

Resources on career planning available in the school and community will be featured in one session and another will present information on "Jobs in the 1980's."

Exploration of interests and abilities will be discussed in another session and testing programs used in the school and by business personnel offices will comprise another.

A general overview of post high school training opportunities and how to choose school subjects in relation to career planning are two sessions that will be presented by members of the school guidance staff.

There is no fee for the evening and advance registration, while not required, is recommended. For more information and to register call the Career Education Project office, 636-0343 on or before Friday, Feb. 20.

APPENDIX A

An article from the Parkview Junior High School Student Newspaper, Fall, 1975.

CAREER EDUCATION - - IT'S FOR YOU!

Here it is second quarter already and many of you I haven't met! Several students have dropped in to the Career Education Center, located in your Media Center, for either their own interests or on classroom assignments. Exciting things are happening! We've seen new films on several careers: actors and actresses, oceanographers, nursing, foresters, pilots, computer operators, athletes, secretaries, telephone linemen, T.V. broadcasters and many more. Students have taken interest tests to find out more about themselves and have then investigated related careers. The ninth graders, during their occupation investigations unit, really used

the Center to explore various occupations. Do you ever wonder about jobs you would like to explore?

Career education is a "personalized" form of education. It puts the positive growth of the student in the "center." It aims to help the student arrive at a more realistic self-assessment, encouraging a greater awareness of self-interests and abilities. The emphasis being on five main goals: 1) self-esteem 2) decision making 3) life-style and vocational exploration 4) interpersonal skills and 5) work ethic. If you are asking how these goals apply to you as an individual person, answer this question, "What can

be more interesting or important than finding out about yourself?"

Yes, Career Education is for you! So come to the Center anytime, whether on your own or on an assignment through your classes. Leave a note if I'm not in. We have games, we can arrange for speakers of your choice to come in, maybe even a community visit to a local business or organization can be worked out. There are all kinds of neat activities going on here - so don't miss out! You'll be surprised at how much fun learning about yourself can be!

Hope to see you soon-
Maureen Twining
Career Education
Director

APPENDIX A

PTA PRESS NOVEMBER 1975 NEWSLETTER FAIRVIEW JUNIOR HIGH SCHOOL

AN ADDED INVITATION

In addition to your standing invitation to visit Fairview (with all its current, active programs) you are now extended a Further Invitation:

WHAT'S INVOLVED? The Roseville School District has been granted federal funds to set up Career Education Resource Centers in three of its five secondary school buildings. The remaining two schools are being assisted with the purchase of materials and the opportunities for curriculum writing.

WHERE'S IT AT? In the Fairview building, the Career Resource Center is located in 201B (opposite the Large Group Room.) Take the UP stairway across from the office and you are almost there!

WHO'S INVITED? You. Me. Parents. Community. Teachers. Students. People of all ages. Career Education has been defined as a "life long process of implementing a self-concept with satisfaction to self and benefit to society." Everyone is invited to observe how this is being implemented on the junior high level.

WHEN DOES IT OCCUR? The Center is open each day during school hours. The students are allowed to use the Center and go through a progression of activities during their regular study mod time.

WHY DOES IT EXIST? Society is in a state of constant change. The Career Resource Center on the secondary level of education exists to help the student within such a society. Its student-objectives are: 1) to develop a positive attitude toward self through an awareness of developing talents, values and interest as they relate to work roles; 2) to develop decision-making skills and an awareness of the results of such decisions; 3) to develop an awareness of occupational areas in terms of work roles, related life styles, and potential satisfactions and dissatisfactions; 4) to develop the interpersonal skills required in work roles; 5) to develop a respect for workers and the place of work in our society.

These objectives are being implemented through a variety of activities. Come and join us!

North Area

Suburban and Neighborhood News

Training considers person's lifestyle

Careers become personal

By JIM NAGEL
Staff Writer

If you think that "career education" in junior or senior high school today is just learning about occupations or "how to get a job" you are several years behind the times.

Career education, as defined in the Secondary Career Education Project now at the end of its first year in Roseville School District 623, is, rather, the sum of all the roles a person will play during his lifetime, not just his occupation at which he earns a living.

ARLAND Benson, director of the experimental project, said one of the goals of career education is to get the student to better know himself, his abilities, his likes and dislikes, so he is better able to make a decision about his future.

As such, career education looks at a lot more than just "a job," or earning a living.

It attempts to help a student identify the kind of lifestyle he would like to have later on and to make decisions that will help him realize that goal.

FOR EXAMPLE, said Dorothy Henriksen, project facilitator, career education will point out to a person that if he is the kind who likes to get away for hunting or fishing trips, there are certain jobs that will allow him the flexibility to take time off when he wants it, rather than keep him in an inflexible two-week vacation slot in the middle of the summer.

Also, the person who likes the out-of-doors might not be happy at a job if it locks him into a city office all the time.

The career education project, 100 per cent funded by a \$105,000 grant from the U.S. Department of Education, has three purposes: 1) to establish career education learning centers in three schools, Parkview and Fairview junior highs and Kellogg Senior High; 2) to train school staff in a coordinated and concentrated approach to career education, and 3) to develop areas of cooperation between the school district and the community to help prepare the student for future life roles.

THE LEARNING centers in the three schools have both print

and non-print materials such as films to help students on individual or group bases in planning their futures.

In addition to helping students decide on occupations, lifestyles or improving their interpersonal relationships, the centers can be used by parents or other adults who might want information about job changes for themselves.

Mrs. Henriksen said a number of women who plan to reenter employment have obtained help at the learning centers.

THE PROJECT has also provided a number of seminars and workshops for teachers to help them bring career education concepts into their classrooms.

Most interesting, however, has been an internship program in

which school district personnel, with cooperation from private business and industry, have had an opportunity to spend time in various fields gaining insight on careers different from their own.

Barbara Grengs, an English teacher at Capitol View Junior High, Little Canada, spent three weeks working at the Children's Theater in Minneapolis.

See Careers, Page 2



Rick Winters, right, math teacher at Parkview Junior High, views a Moog numerically controlled mill in which a tape controls functions. The operation is explained by Karl Neumeier, vice president of technical ser-

vices for Programmed and Remote Systems, Inc., of Shoreview. Winters spent time at the company offices and its production facilities as part of his internship with the career education project. — Staff Photo. 88



The Dispatch

Tuesday,

June 1, 1976

Careers

Continued from Page 1

"I CAME back to my classes ready to try out new staging and directing ideas," she said.

"Many of the problems I experienced with my students — saying their lines without real awareness of their meaning, for example — also seemed to be a problem for professionals."

Working next to a theater director gave her some practical ideas for dealing with some of her problems in class, she said.

BILL HOGAN and Virginia Burton, Kellogg High School English teachers, spent eight days working at TV and radio production studios.

"The experience," they wrote in a report, "demonstrated that many problems we have with the media class are problems professionals also have."

"We felt that effectively coordinated, the media curriculum offers a great opportunity for actual work experience within the high school. As an end result, the students involved will not only gain an understanding of a particular job and learn basic English skills but will also be funneled into a situation where work qualities such as responsibility, accountability and dependability are effectively taught."

FERIAL Abraham, a home economics teacher and work coordinator at Ramsey High School, said her experience in the dietary division of St. Paul Ramsey Hospital will enable her to give students realistic de-

scriptions of the duties, extensive post-high school education and years of experience needed before being able to hold a position as dietary supervisor and dietician.

One of the intents of the project is not only to give school personnel experience in the work world, but also to create an exchange where workers from various fields spend time in school seeing how their job is taught.

This year that did not materialize, Benson said, but a greater emphasis will be placed on the exchange next year.

BENSON, an 11-year guidance counselor in the school district prior to heading the career education project, said funding of the project for next year is uncertain until later this month.

But even if federal funding is not renewed, the project will have lasting effect because of the establishment of the learning centers and the updating of a list of community resources that can be used in career education.

The North Suburban Chamber of Commerce and the Roseville Rotary Club have worked with the school district in the project and have indicated a willingness to continue, regardless of funding.



Dean Erickson, left, social studies teacher at Parkview Junior High School, Roseville, interned with the Minnesota Pollution Control Agency to gain experience that would aid him in teaching the political process. Here he checks a rooftop air monitoring station in downtown Minneapolis with PCA technician Lon Loken. — Staff Photo.

MINNESOTA

Instructional Materials Center

MINNESOTA EDUCATORS USE COMPUTER TO EVALUATE READABILITY OF TEXTBOOKS

S.T.A.R., General Motor's Computerized Readability Evaluation Program is now available throughout the state of Minnesota to all educators who have access to the Minnesota Educational Computer Consortium. This capability allows a school system to efficiently evaluate written materials as to their appropriateness for classroom use.

It has been proven that many instructional materials are loaded with multi-syllable words and complex sentences and are therefore too difficult to comprehend for a large number of the students to read independently. Until recently the classroom instructor's only means of determining the reading level of any given text was to manually administer a readability index. This generally involved the need for some training in theory and administration procedures as well as a time consuming process of counting words, sentences and syllables.

The S.T.A.R. program offers two advantages. It cuts manual counting and therefore reduces the time consumption to a minimum. It also can be used by anyone with access to a common computer system, knowledge of the theory is not needed and the only skill necessary is the ability to type plain text.

In using the M.E.C.C. computer to run the S.T.A.R. program, the instructor is provided with the following information: The text printed out in full; a list of all words in the sample which have three or more syllables; the number of sentences in the sample; the number of words; the number of syllables; average sentence length; average number of syllables per word; the Flesch index; the Dale index; and the grade level equivalent of the passage. All of this information is provided by the computer in approximately 15 seconds!

The information provided by the S.T.A.R. allows instructors to make appropriate choices in acquiring textbooks for classroom use. It also helps educators structure the use of those textbooks already available.

If you are interested in accessing this program or wish further information, contact your local M.E.C.C. field coordinator or Eileen Ostergaard at the MIMC.

Career Education

ROSEVILLE SECONDARY CAREER EDUCATION PROJECT

The Secondary Career Education Project in Roseville School District 623 has completed the first year. It is funded by a grant from the U.S. Department of Education having three distinct purposes: 1) to train school staff in a coordinated and concentrated approach to career education; 2) to develop areas of cooperation between the school district and the community to help prepare students for future life roles; and 3) to establish career education learning centers in three of the schools in the district.

This project goes beyond learning about careers and getting a job but it is the total of all the roles a person will go through during his/her lifetime and attempts to assist the student to identify the kind of lifestyle he or she would like to have later in life and to make decisions that will bring about that goal.

One of the projects in the program is an internship whereby school district personnel have gone into private business and industry spending some time in the various fields to gain an insight on different careers and to become aware of some of the problems, advantages and disadvantages encountered. It is the hope that this will be an exchange for people from business and industry to spend some time in the schools at a later date and to see how their jobs are being taught.

Arland Benson, the Director of the Project, feels that the program will have lasting affect because centers will be established and community resources used in career education will be updated.

The North Suburban Chamber of Commerce and the Roseville Rotary Club have worked with the schools on this project and are willing to continue with this endeavor.

TRAILBLAZER TO HIT THE ROAD BY FALL

Take an old truck trailer. Add the magic of creative minds and hard work. And what do you get? The vocational-technical education "Trailblazer."

916 Area Vocational-Technical Institute, under a \$20,000 grant from the Minnesota Department of Educa-

MIMC

August, 1976

NEWS YOU CAN USE